

BENTON HARBOR POWER PLANT LIMNOLOGICAL STUDIES

PART XVI. PSAMMOLITTORAL INVESTIGATION 1972

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In Part VII (March 1971) of our report series relative to the Donald  
C. Cook Nuclear Station, we established the following report format:

- A. COOK PLANT PREOPERATIONAL STUDIES
  - A. 1 Recording of Local Water Temperatures
  - A. 2 Study of Floating Algae and Bacteria
  - A. 3 Development of a Monitor for Phytoplankton (ABANDONED)
  - A. 4 Study of Attached Algae
  - A. 5 Study of Zooplankton
  - A. 6 Study of Aquatic Macrophytes
  - A. 7 Study of Benthic and Psammolittoral Organisms
  - A. 8 Study of the Local Fishes
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  - A. 10 Study of Entrainment and Impingement
- B. SURVEYS OF EXISTING WARM WATER PLUMES
- C. THE ICE BARRIER AT THE COOK PLANT SITE
- D. EFFECTS OF EXISTING THERMAL DISCHARGES ON LOCAL ICE BARRIERS
- E. EFFECTS OF RADIOACTIVE WASTES IN THE AQUATIC ENVIRONMENT
  - E. 1 Gamma Scan of Bottom Sediments (FINISHED)
  - E. 2 The Most sensitive Organism for Concentration of Radwastes (FINISHED)
  - E. 3 Study of Lake Michigan's Present Radioactivity Content (FINISHED)

This report covers only the Psammolittoral organisms of item A. 7 of the  
above format.



## INTRODUCTION

Quantitative studies of the psammolittoral zone of freshwater lakes are few. The interstitial fauna has been neglected by most students for at least three reasons: 1) it is of little quantitative importance in the productivity of lakes (Ruttner-Kolisko 1971); 2) it is laborious to study, since the organisms are small, fragile, and difficult to separate from their substrate without damage; and 3) most of the psammolittoral organisms belong to taxonomic groups which are poorly known, and it is seldom possible for the non-specialist to determine species.

## FIELD METHOD

### Animal and Diatom Psammon

We have relied upon the two major studies done in this country, Pennak (1940) and Neel (1948) in choosing the following method.

Three sampling sites were chosen: the first ("DC") is located approximately 200 m north of the Donald Cook plant, the second ("NDC") at a small semi-private beach off Grand Mere Road (about three miles north of the plant), and the third ("SDC") at the southern end of Warren Dunes State Park (about five miles south of the plant).

A clear plastic tube with an interior diameter of 4.7 cm was thrust into the sand to a mark indicating a depth of five cm. The tube was then carefully removed and stoppered at each end. When vision was hampered by waves, a longer core was taken; the excess sand at the bottom of the core was then pushed out of the tube and sliced off in the field. At each site two sets of samples were taken of sand from the waterline, from 1 m shoreward of the waterline, and from 1 m lakeward of the waterline. Temperatures at each sampling point were read to the nearest 0.5° C from a stem thermometer thrust

ca. 5 cm into the sand. Weather conditions and wave height were noted.

#### LABORATORY METHODS

##### Animal Psammon

The samples from each site were taken directly to a field laboratory to be washed and preserved. Each sample was placed in a plastic pint container and flooded with 75-100 ml of water heated to near boiling. This killed the micro-organisms in an expanded position which we consider to be as satisfactory as those obtained by the use of relaxants. The sand was then stirred vigorously and the water decanted into a pint jar. This washing process was repeated four times. Formalin was then added to the jar, and the samples were labelled and returned to Ann Arbor for examination.

Concentration of the organic material for examination was accomplished by carefully pipetting most of the formalin solution from a sample jar in which the material had time to settle. The organic material was then washed into a centrifuge tube and either allowed to collect at the bottom or gently centrifuged. Rapid centrifugation resulted in clumping. We used a fine pipette to remove the material, 1 ml at a time, and placed it in a Sedgewick-Rafter cell. An excessive concentration made it difficult to detect the organisms among the debris, so we had to examine several 1 ml portions, until the entire sample was processed. The metazoans were then identified and counted under a compound microscope at a magnification of 100 diameters.

##### Diatom Psammon

The samples from each site were taken directly to a field laboratory and immediately frozen for return to Ann Arbor. In the lab the samples are processed to clean the diatom frustules. The frozen sample is placed into a one-liter beaker and covered by hydrogen peroxide in an amount about equal to the amount of the sample. To speed the reaction a small amount, normally a few crystals, of potassium dichromate are added. The solution will turn

dark purple and effervesce. Agitation of the solution in the beaker is necessary for continued reaction. The reaction is considered complete when the solution no longer effervesces and the color of the solution turns yellow.

To separate the diatom frustules from the sediment, the solution is stirred, resulting in the diatoms remaining in suspension longer than the sediment which settles out rapidly. The diatom frustules are then separated from the sediment by pouring the solution containing the frustules into a smaller beaker. To be certain that all diatoms are removed, the remaining sediment solution is stirred several additional times now using distilled water and again pouring the diatom frustules into the smaller beaker. The suspended material in the smaller beaker is then allowed to settle and when the water is clear it is decanted and refilled with distilled water. This procedure is followed until the distilled water loses its yellow tint.

The sample is now ready for mounting on a glass slide. The diatomaceous material is suspended in water, a glass cover slip is covered by the material using a small pipet and the water is allowed to evaporate. The slide is then baked at the 450 setting on a hot plate for 10 minutes. A drop of Hyrax mounting medium is placed on the middle of the slide and the cover slip is inverted on the Hyrax. This slide is now baked until all the toluene solvent in the Hyrax boils out. The slide is then removed from the hot plate, the cover slip is centered and tapped down, and the excess Hyrax is removed from the slide once it has cooled sufficiently. The slide is labelled using a diamond marker as to date and location of the sample.

## DISCUSSION

### Animal Psammon

We began monthly collections of animal psammon in July 1972, and continued through November. Our study focussed on the narrow wash zone of the beach - 1 m above and below the waterline usually represents the limits of wave advance and retreat. Sand in this region was free of finer sediments, contained only small amounts of organic material, and was saturated or nearly with water. Temperatures within the sand closely approximated water temperatures, although above the waterline air temperature exerted a slight influence ( $\pm 2^{\circ}\text{C}$  - Table 1).

The contents of samples collected through October, 1972, are presented in Tables 2-5. In July the SDC site was located at Weko Beach rather than at Warren Dunes State Park. The numbers 1, 2, and 3 designate respectively samples collected above the waterline, at the waterline, and below the waterline; replicate samples are indicated by the letters A and B. We have chosen to present the data as numbers of individuals per sample rather than on a volumetric or areal basis. Each sample contained  $86.7\text{ cm}^3$  of sand and encompassed an area of  $17.3\text{ cm}^2$ . Rotifera and Crustacea known to be planktonic have not been included in the tables. Their frequent appearance in psammon samples can be attributed to stranding above the waterline or to inclusion with the small amount of free water incorporated in cores taken below the waterline. Protozoans, particularly small ciliates, were numerous, but we did not attempt to count them since they are impossible to preserve. We have identified the metozoans to the genus level; in a few cases we have used specific epithets, but we regard these identifications as tentative.



Table 1. Temperatures ( $^{\circ}\text{C}$ ) taken ca. 5 cm below the surface of the sand 1 m above the waterline (1), at the waterline (2), and below the waterline (3), and estimated wave heights (nearest tenth m) at 3 collection sites on 5 dates in 1972.

<u>Date</u>	<u>Site</u>	<u>Temperature</u>			<u>Wave Height</u>
		<u>1</u>	<u>2</u>	<u>3</u>	
18 July	NDC	23	23	23	0.2
	DC	23	23	23	
	SDC	24	22.5	22.5	0.3
10 August	NDC				0.1
	DC	19	17	17	
	SDC	17	17	17.5	0.1
6 September	NDC	20.5	19	18.5	0.4
	DC				0.2
	SDC	22.5	20		0.2
7 October	NDC	15.5	14.5	15	0.5
	DC	15.5	15	15	0.3
	SDC	16	15.5	15	0.5
4 November	NDC	10	10	10	0.9
	DC	9.5	10	10	0.6
	SDC	10	10	10	0.9

Table 2. Numbers of metazoans collected in replicate cores 1 m above the waterline (1A,1B), at the waterline (2A,2B) and 1 m below the waterline (3A,3B) at three Lake Michigan beach sites (Warren Dunes State Park, SDC; Donald C. Cook Plant, DC; and Grand Mere Road, NDC) on 18 July 1972.

18 July 1972

	SDC			SDC			DC			DC			DC			NDC			NDC		
	1A	1B		2A	2B	3A	3B	1A	1B		2A	2B	3A	3B	1A	1B		2A	2B	3A	3B
Rotifers																					
Cephalodella	1							1	1									2		4	4
Colurella	1								1											4	4
Dicranophorus	57	53		3	5	1		24	37		8	15	13	6	69	61		13	32	6	3
Encentrum																					
Lecane																					
Lepadella	1	2		2	3	1		3	2		1			2	1	10		2	11	3	5
Monostyla									1				1								1
Proales	2				4			1			7			7	3	1				11	
Trichocerca	4			1	1			1	1						15	16			4	1	
Wierzejskiella											3			18							
Bdelloid rotifers	1			30	30	3		6	1		1		6	1				6	33	11	24
Other rotifers	3					1			1		1								5		
Gastrotichs																			3	7	
Chaetonotus																					
Ichthydium	1							1	3										2		
Turbellarians									1												
species 1	2	6		14	9	1	5	7	13		8	82	16	11	4	3		21	14	4	6
species 2																					
Chironomid larvae																					
Paracladopelma								3	3					1	2	2		7	7	35	14
Oligochaetes																					
Aelosomatidae								5			1				1	20		14		3	
Naididae				21	21													1		1	
Harpacticoid copepods																					
Parastenocaris																					
Tardigrades												1									
Nematodes																					
Total	71	66		71	74	7	5	56	66		20	109	40	46	95	123		51	128	86	61

Table 3. Numbers of metazoans collected in replicate cores 1 m above the waterline (1A,1B), at the waterline (2A,2B), and 1 m below the waterline (3A,3B) at three Lake Michigan beach sites (Warren Dunes State Park, SDC; Donald C. Cook Plant, DC; and Grand Mere Road, NDC) on 10 August 1972.

10 August 1972

	SDC			SDC			DC			DC			NDC			NDC		
	1A	1B		2A	2B		3A	3B		2A	2B		1A	1B		2A	2B	
<b>Rotifers</b>																		
<i>Cephalodella</i>				3	5								1	5				
<i>Colurella</i>	1			4			4	3										
<i>Picranophorus</i>	8	1		5	6	1	23	5		5	4		5	4		9	16	7
<i>Excetrum</i>				2			4										1	
<i>Lecane</i>							1											2
<i>Lepadella</i>				2	1		5	1					5			2	2	
<i>Macrostyla</i>	3			2	2		2	5								1		
<i>Proales</i>	3			13	7	1	23	7		2	1		2	1		6	2	3
<i>Trichocerca</i>				2	3		2	1									2	
<i>Wierzejskiella</i>	14	2		6	11	3	56	14		6	11		661	85		33	33	18
Bdelloid rotifers							1											4
Other rotifers				1			1	1								2		
<b>Gastrotrophs</b>																		
<i>Chaetognothus</i>				1	1		2						1					1
<i>Ichthyidum</i>				2	6		1											2
<b>Turbellarians</b>																		
species 1	7	23		7	11	6	38	7		12	9		10	54		3	9	13
species 2	1						3											14
<b>Chironomid larvae</b>																		2
<i>Paracladopelma</i>						1	5	1										6
<b>Oligochaetes</b>																		
Aelosomatidae	5	1		1	12	1	199	60		105	24		111	113		197	243	203
Naididae	8	3			2	1	207	53		14			14	67		10	11	11
<b>Harpacticoid copepods</b>																		16
<i>Parastenocaris</i>							2							1				
<b>Tardigrades</b>																		
<b>Nematodes</b>							2									2		
<b>Total</b>	50	30		44	74	12	580	159		146	53		814	325		264	321	257
																		224



Table 5. Numbers of metazoans collected in replicate cores 1 m above the waterline (1A,1B), at the waterline (2A,2B), and 1 m below the waterline (3A,3B) at three Lake Michigan beach sites (Warren Dunes State Park, SDC; Donald C. Cook Plant, DC; and Grand Mere Road, NDC) on 7 October 1972.

7 October 1972

	SDC			SDC			DC			DC			NDC			NDC		
	1A	1B	2A	2B	3A	3B	1A	1B	2A	2B	3A	3B	1A	1B	2A	2B	3A	3B
<b>Rotifers</b>																		
<i>Cephalodella</i>																		1
<i>Coturella</i>																		
<i>Dicranophorus</i>	5	21	1	2			2	2	2	7	10						3	2
<i>Encentrum</i>																	4	2
<i>Lecane</i>																		
<i>Lepadella</i>							1							1				
<i>Monostyla</i>																		
<i>Proclae</i>								2	4	12							1	4
<i>Trichocerca</i>																		3
<i>Wierzejskiella</i>	4	31	5	2		4	13	9	35	18							28	60
Bdelloid rotifers			1							1								34
Other rotifers	1				1		2							1				1
Gastrotrichs																		
<i>Gastrotectus</i>																		
<i>Ichthydium</i>																		1
Turbellarians																		
species 1	4	24	10	4		3	7	6	17	56							4	5
species 2																		
Chironomid larvae																		
<i>Paracladopelma</i>																		
Oligochaetes																		
Aelosomatidae	2		1															4
Naididae							1											1
Harpacticoid copepods																		
<i>Parastenocaris</i>																		
Tardigrades																		
Nematodes				4														2
Total	14	79	17	13	0	8	26	19	65	97	233	128	15	16	N.D.	45	83	44

On a given date, all samples showed qualitative similarity, but quantitative differences were often considerable (Figure 1). Populations above the waterline averaged slightly higher than those at the waterline, and average populations below the waterline were slightly smaller. This trend may have reversed with the onset of cold weather. We found a mean of 65 organisms per sample on July 18. Largest numbers were present in the 10 August samples, which averaged 258 per sample. However, as Figure 1 shows, these high counts in August were found only at the NDC and DC sites; the SDC site (Warren Dunes) had low counts in August. Mean population size had declined to 152 per sample on 6 September and to 53 per sample on 7 October. A single sample examined from among the 4 November collections contained only 4 organisms. The fauna was richest in number of species on the August and September dates. On two of the four dates (10 August and 7 October) almost all samples collected at the SDC site contained markedly fewer animals than corresponding samples at the other two sites.

The composition of the interstitial fauna is of considerable interest since studies on this aspect of Great Lakes ecology are lacking. A single exception is Pennak's 1940 study in which he included one visit to a Lake Michigan beach protected by a breakwater and two visits to an unprotected Lake Superior beach.

We found rotifers to be the numerically dominant animal group in the meiopsammon, with Wierzejskiella velox and a species of Dicranophorus - possibly D. hercules - being the most abundant taxa. Largest numbers of Dicranophorus were present in July and September, while Wierzejskiella accounted for most of the high rotifer counts in August and was abundant on each of the other three dates. Both species are raptorial feeders. Two

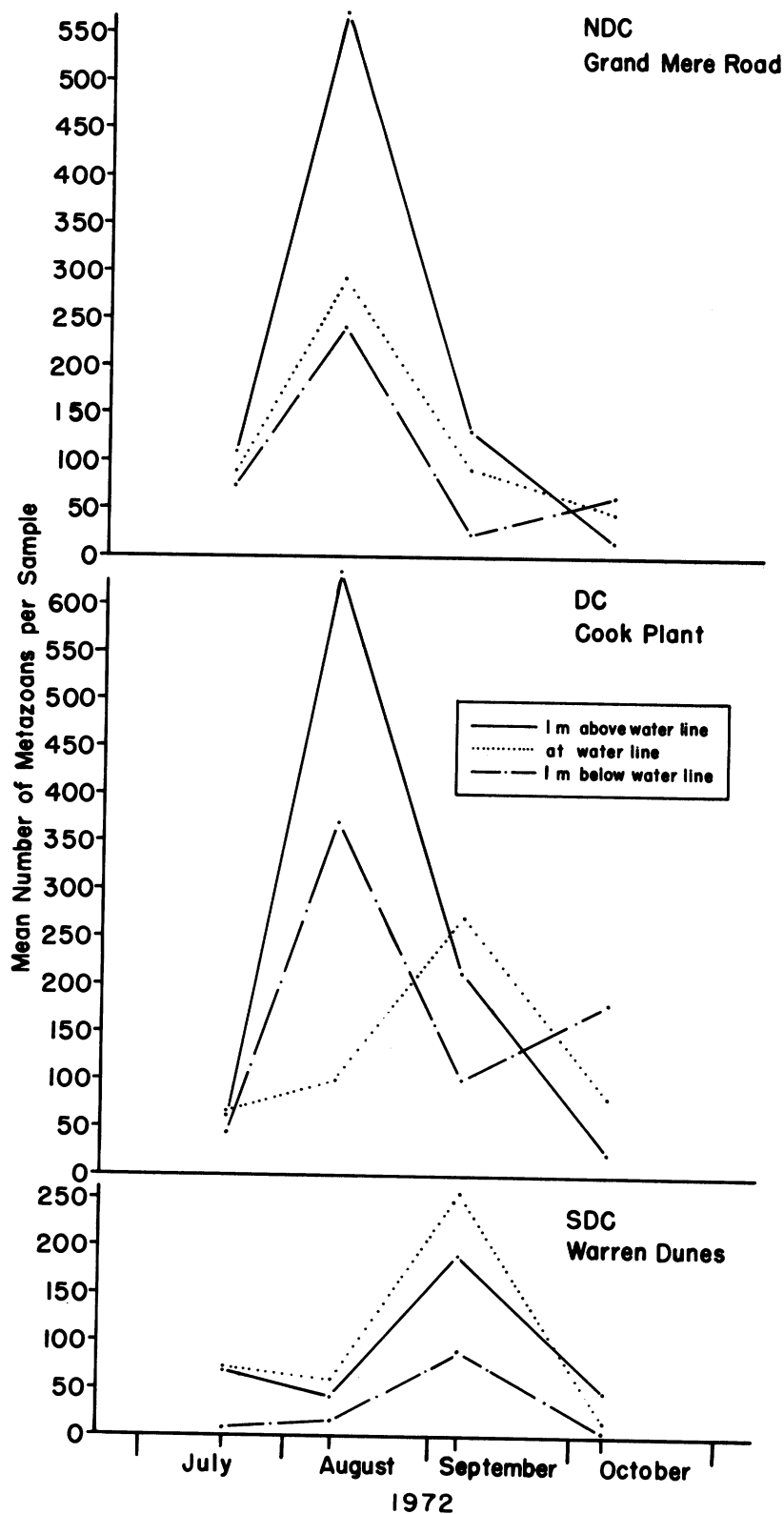


Figure 1. Mean total counts of psammolittoral metazoans found in cores taken 1 m above the waterline, at the waterline and 1 m below the waterline at three Lake Michigan beach sites on four dates in 1972.

species of Leptadella, L. patella and L. ovalis were present in moderate numbers during these three months. All other rotifer species appeared only sporadically. These were members of the genera Colurella, Enentrum, Lecane, Monostyla, Cephalodella, and Trichocerca. The last three genera each consisted of more than one species, with Cephalodella gibba and Trichocerca insolens being the only two species we could identify with confidence.

Gastrotrichs were a regular component of the July, August, and September faunas, but always occurred in small numbers. With a length of 60-70  $\mu$ , Ichthyidium podura was the smallest metazoan we observed in the fauna. The other gastrotrich present was a species of Chaetonotus which did not conform to any to the descriptions given by Brunson (1959).

The largest organism present was an elongate, cylindrical microturbellarian, designated species 1 for this report, which reached a length of 4 mm. At this size it is visible to the unaided eye only as a minute white thread. Thus it is unlikely that even this organism could serve as food for shore birds. It is of interest because of its ubiquitous presence in samples taken at the Lake Michigan waterline. A second, smaller turbellarian, species 2, occurred in limited numbers - primarily in September.

Early larval instars of the small midge, Paracladopelma cfr. nereis were found in several of the samples collected during July, especially those from the NDC site. In August these chironomids were almost completely absent. In September they were present in almost every sample, averaging 44 per sample at the DC site. This is equivalent to more than 25,000 per m<sup>2</sup>. By October they had again disappeared, indicating probable migration to deeper water. Two individuals of a second, somewhat larger midge, Parachironomus cfr. demeijerei, were encountered.



Oligochaetes were very abundant in the August samples, several of which contained over 200 individuals. We found a few immature tubificids; but they were fragmented, and members of this largely sedentary group would not be expected to survive the rigors of strong wave action. The bulk of the oligochaetes were small (less than 1.5 mm) members of the families Naididae and Aeolosomatidae. Of the naidids the genus Chaetogaster could be recognized, but most belonged to one or more still undetermined genera. Similarly, among the Aeolosomatidae, the genus Aeolosoma could be recognized; but most belonged to a species seemingly devoid of setae. The latter may be the genus Rheomorpha, common to the psammon of Europe but not yet reported from North America (Brinkhurst and Jamieson, 1971).

In August and again in October we found a few individuals of the harpacticoid copepod, Parastenocaris. This cosmopolitan sand-dweller has not previously been reported from Lake Michigan, but Pennak found it at the Lake Superior beach he studied.

Several other animal groups were part of the Lake Michigan meiopsammon rarely and in very small numbers. Tardigrades are often abundant at the shores of smaller lakes, but we found a total of only 8 individuals in our collections. Nematodes, acarinids, and immature ostracods appeared in even smaller numbers. All three groups are probably more abundant in the deeper benthic regions.

Lake Michigan's beaches lack the mollusks and large burrowing animals characteristic of marine tidal flats. And as Pennak reported, rotifer populations are smaller and consist of fewer species than those occurring in the more stabilized sand of small freshwater lakes. Pennak did not find tardigrades, copepods, or nematodes - groups we found only in very low numbers. We found sometimes high numbers of turbellarians, oligochaetes, and chironomid

larvae - groups mentioned but not discussed by either Pennak (1940) or Neel (1948).

It is reasonable to conclude that the exposed beaches of the Great Lakes constitute a harsh, inhospitable environment for the interstitial animals. In addition to the abrasive action of shifting sands, these areas undoubtedly experience large temperature fluctuations. Since these organisms are very small, they may be expected to have rapid reproductive rates. Given these considerations, it is possible to suggest a model which helps explain the large variations we found in psammon populations. Perhaps many or most of the interstitial inhabitants are decimated or washed out by each episode of strong wave action, leaving only a small inoculum of the hardier forms; and these reproduce rapidly during calm periods, taking advantage of the salubrious conditions afforded by stable sands heated by the sun. If this were the case, the wave history in the period preceeding the sample collection would be an important determinant of population size.

#### Diatom Psammon

The diatom psammon identified to date are given in Tables 6, 7, 8, and 9 for the months of May, August, September, and November 1972. Except for the month of May which was collected in duplicates near the plant only, the other months reflect the sampling scheme described above. For the sake of completeness, the identifications for each of the stations and for each site are presented, as well as the master species list for each month. From this monthly species listing a master species list for 1972 has been compiled as Table 10. Table 10 also presents the occurrence of the species in reference to the waterline as well as in which month of the year it occurred.

Table 6 . Diatom psammon, May 1972.

Master species list

<i>Achnanthes affinis</i>	<i>Cymatopleura solea</i>
<i>Achnanthes clevei</i>	<i>Cymatopleura solea v. apiculata</i>
<i>Achnanthes clevei v. rostrata</i>	<i>Cymbella affinis</i>
<i>Achnanthes conspicua</i>	<i>Cymbella latens</i>
<i>Achnanthes detha</i>	<i>Cymbella microcephala</i>
<i>Achnanthes exigua v. heterovalva</i>	<i>Cymbella naviculiformis</i>
<i>Achnanthes hungarica</i>	<i>Cymbella prostrata</i>
<i>Achnanthes lanceolata</i>	<i>Cymbella subventricosa</i>
<i>Achnanthes lanceolata v. dubia</i>	<i>Cymbella turgida v. pseudogracilis</i>
<i>Achnanthes lanceolata v. elliptica</i>	<i>Cymbella spp. (our #6)</i>
<i>Achnanthes lanceolata v. ?</i>	<i>Diatoma anceps</i>
<i>Achnanthes laurenburgiana</i>	<i>Diatoma hiemale v. mesodon</i>
<i>Achnanthes linearis</i>	<i>Diatoma tenue</i>
<i>Achnanthes minutissima</i>	<i>Diatoma tenue v. elongatum</i>
<i>Achnanthes pinnata</i>	<i>Diatoma vulgare</i>
<i>Achnanthes spp.</i>	<i>Dinobryon divergens</i>
<i>Amphipleura pellucida</i>	<i>Diploneis oculata</i>
<i>Amphiprora ornata</i>	<i>Diploneis parma</i>
<i>Amphora calumetica</i>	<i>Diploneis spp.</i>
<i>Amphora montana</i>	<i>Eunotia praerupta v. inflata</i>
<i>Amphora neglecta</i>	<i>Eunotia spp.</i>
<i>Amphora ovalis</i>	<i>Fragilaria capucina</i>
<i>Amphora ovalis v. gracilis</i>	<i>Fragilaria capucina v. mesolepta</i>
<i>Amphora ovalis v. libyca</i>	<i>Fragilaria construens</i>
<i>Amphora ovalis v. pediculus</i>	<i>Fragilaria construens v. binodis</i>
<i>Amphora sibirica</i>	<i>Fragilaria construens v. capitata</i>
<i>Amphora subcostulata</i>	<i>Fragilaria construens v. minuta</i>
<i>Amphora veneta</i>	<i>Fragilaria construens v. subsalina</i>
<i>Amphora veneta v. angularis</i>	<i>Fragilaria crotonensis</i>
<i>Amphora spp.</i>	<i>Fragilaria intermedia</i>
<i>Asterionella formosa</i>	<i>Fragilaria intermedia v. fallax</i>
<i>Caloneis amphisbaena</i>	<i>Fragilaria pinnata</i>
<i>Caloneis ventricosa</i>	<i>Fragilaria pinnata v. intercedens</i>
<i>Caloneis ventricosa v. minuta</i>	<i>Fragilaria pinnata v. lancettula</i>
<i>Cocconeis diminuta</i>	<i>Fragilaria vaucheriae</i>
<i>Cocconeis disculus</i>	<i>Frustulia vulgaris</i>
<i>Cocconeis pediculus</i>	<i>Gomphonema angustatum</i>
<i>Cocconeis placentula</i>	<i>Gomphonema constrictum</i>
<i>Cocconeis placentula v. euglypta</i>	<i>Gomphonema intricatum v. pumila</i>
<i>Cyclotella comta</i>	<i>Gomphonema lanceolatum</i>
<i>Cyclotella kutzingiana v. planetophora</i>	<i>Gomphonema lanceolatum v. insignis</i>
<i>Cyclotella meneghiniana</i>	<i>Gomphonema olivaceodes</i>
<i>Cyclotella meneghiniana v. plana</i>	<i>Gomphonema olivaceum</i>
<i>Cyclotella michiganiana</i>	<i>Gomphonema shpaerophorum</i>
<i>Cyclotella ocellata</i>	<i>Gomphonema spp.</i>
<i>Cyclotella pseudostelligera</i>	<i>Gyrosigma spp.</i>
<i>Cyclotella stelligera</i>	<i>Hantzschia amphioxys</i>
	<i>Melosira distans</i>

Table 6 con't. Diatom psammon, May 1972.

<i>Melosira granulata</i>	<i>Navicula tripunctata</i>
<i>Melosira islandica</i>	<i>Navicula tripunctata</i> v. <i>schizonemoides</i>
<i>Melosira italica</i>	<i>Navicula vanheurckii</i>
<i>Meridion circulare</i>	<i>Navicula ventralis</i> ?
<i>Meridion circulare</i> v. <i>constrictum</i>	<i>Navicula viridula</i>
<i>Navicula accomoda</i>	<i>Navicula viridula</i> v. <i>rostellata</i>
<i>Navicula anglica</i> v. <i>subsalsa</i>	<i>Navicula wittrockii</i>
<i>Navicula aurora</i>	<i>Navicula</i> spp. (our #78)
<i>Navicula bacillum</i>	<i>Navicula</i> spp.
<i>Navicula capitata</i>	<i>Neidium dubium</i>
<i>Navicula capitata</i> v. <i>hungarica</i>	<i>Neidium dubium</i> fo. <i>constrictum</i>
<i>Navicula capitata</i> v. <i>luneburgensis</i>	<i>Neidium iridis</i> fo. <i>vernalis</i>
<i>Navicula cineta</i>	<i>Neidium</i> spp. (our #3)
<i>Navicula costulata</i>	<i>Nitzschia acicularis</i>
<i>Navicula cryptocephala</i>	<i>Nitzschia acuta</i>
<i>Navicula cryptocephala</i> v. <i>intermedia</i>	<i>Nitzschia amphibia</i>
<i>Navicula decussis</i>	<i>Nitzschia angustata</i>
<i>Navicula diluviana</i>	<i>Nitzschia apiculata</i>
<i>Navicula fracta</i>	<i>Nitzschia bacata</i>
<i>Navicula gastrum</i>	<i>Nitzschia confinis</i>
<i>Navicula gregaria</i>	<i>Nitzschia dissipata</i>
<i>Navicula gottlandica</i>	<i>Nitzschia dissipata</i> v. <i>media</i>
<i>Navicula heufleri</i>	<i>Nitzschia fonticola</i>
<i>Navicula integra</i>	<i>Nitzschia goetziana</i>
<i>Navicula lacustris</i>	<i>Nitzschia palea</i>
<i>Navicula lanceolata</i>	<i>Nitzschia recta</i>
<i>Navicula latens</i>	<i>Nitzschia spiculoides</i>
<i>Navicula menisculus</i>	<i>Nitzschia tryblionella</i> v. <i>lavidensis</i>
<i>Navicula menisculus</i> v. <i>psaliensis</i>	<i>Nitzschia</i> spp. (our #1)
<i>Navicula micropupula</i>	<i>Nitzschia</i> spp. (our #2)
<i>Navicula minima</i>	<i>Oestrupia zachariasii</i>
<i>Navicula mutica</i>	<i>Opephora martyi</i>
<i>Navicula nyassensis</i> fo. <i>minor</i>	<i>Pinnularia globiceps</i> fo. <i>krookei</i> ?
<i>Navicula paludosa</i>	<i>Pinnularia molaris</i>
<i>Navicula protracta</i>	<i>Rhizosolenia eriensis</i>
<i>Navicula pseudoclementis</i>	<i>Rhizosolenia gracilis</i>
<i>Navicula pupula</i>	<i>Rhoicosphenia curvata</i>
<i>Navicula pupula</i> v. <i>rostrata</i>	<i>Stauroneis smithii</i>
<i>Navicula radiosa</i>	<i>Stephanodiscus alpinus</i>
<i>Navicula radiosa</i> v. <i>tenella</i>	<i>Stephanodiscus binderanus</i>
<i>Navicula reinhardtii</i>	<i>Stephanodiscus hantzschii</i>
<i>Navicula scutelloides</i>	<i>Stephanodiscus minutus</i>
<i>Navicula secreta</i> v. <i>apiculata</i>	<i>Stephanodiscus niagarae</i>
<i>Navicula seminuloides</i>	<i>Stephanodiscus subtilis</i>
<i>Navicula seminulum</i>	<i>Stephanodiscus tenuis</i>
<i>Navicula seminulum</i> v. <i>hustedtii</i>	<i>Stephanodiscus transilvanicus</i>
<i>Navicula simplex</i>	<i>Stephanodiscus</i> spp. (our #5)
<i>Navicula stroesei</i>	<i>Stephanodiscus</i> spp. (our #14)
<i>Navicula submuralis</i>	<i>Surirella angusta</i>
<i>Navicula terminata</i>	<i>Surirella ovata</i>

Table 6 con't. Diatom psammon, May 1972.

*Synedra filiiformis*  
*Synedra incisa*  
*Synedra ostenfeldii*  
*Synedra rumpens*

*Synedra rumpens* v. *scotia*  
*Synedra ulna*  
*Tabellaria fenestrata*  
 Unknown diatom species (one)

Sample DCAWLA, Slide #1

*Achnanthes clevei*  
*Achnanthes clevei* v. *rostrata*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes minutissima*  
*Amphipleura pellucida*  
*Amphiprora ornata*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Amphora sibirica*  
*Amphora veneta* v. *angularis*  
*Asterionella formosa*  
*Caloneis amphisbaena*  
*Caloneis ventricosa*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cocconeis placentula*  
*Cyclotella comta*  
*Cyclotella meneghiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella stelligera*  
*Cymatopleura solea*  
*Cymbella latens*  
*Cymbella microcephala*  
*Cymbella prostrata*  
*Cymbella turgida* v. *pseudogracilis*  
*Diatoma tenue*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*  
*Dinobryon divergens*  
*Diploneis* spp.  
*Eunotia praerupta* v. *inflata*  
*Fragilaria capucina*  
*Fragilaria capucina* v. *mesolepta*  
*Fragilaria construens* v. *binodis*  
*Fragilaria construens* v. *minuta*  
*Fragilaria construens* v. *subsalina*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria intermedia* v. *fallax*  
*Fragilaria pinnata*

*Fragilaria pinnata* v. *lancettula*  
*Fragilaria vaucheriae*  
*Gomphonema angustatum*  
*Gomphonema olivaceum*  
*Gyrosigma* spp.  
*Hantzschia amphioxys*  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Meridion circulare* v. *constrictum*  
*Navicula accomoda*  
*Navicula bacillum*  
*Navicula capitata*  
*Navicula capitata* v. *hungarica*  
*Navicula costulata*  
*Navicula cryptocephala*  
*Navicula cryptocephala* v. *intermedia*  
*Navicula decussis*  
*Navicula gastrum*  
*Navicula heufleri*  
*Navicula integra*  
*Navicula lanceolata*  
*Navicula latens*  
*Navicula menisculus* v. *upsaliensis*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula mutica*  
*Navicula nyassensis* fo. *minor*  
*Navicula pupula*  
*Navicula pupula* v. *rostrata*  
*Navicula radiosa*  
*Navicula radiosa* v. *tenella*  
*Navicula scutelloides*  
*Navicula secreta* v. *apiculata*  
*Navicula seminuloides*  
*Navicula submuralis*  
*Navicula terminata*  
*Navicula tripunctata*  
*Navicula vanheurckii*  
*Navicula viridula*  
*Navicula viridula* v. *rostellata*  
*Navicula* spp. (our #78)  
*Neidium dubium*

Table 6 con't. Diatom psammon, May 1972.

*Neidium iridis* fo. *vernalis*  
*Nitzschia acicularis*  
*Nitzschia acuta*  
*Nitzschia angustata*  
*Nitzschia apiculata*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia dissipata* v. *media*  
*Nitzschia fonticola*  
*Nitzschia goetziana*  
*Nitzschia recta*  
*Nitzschia tryblionella* v. *levidensis*  
*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Oestrupia zachariasii*  
*Pinnularia molaris*

*Rhizosolenia gracilis*  
*Rhoicosphenia curvata*  
*Stephanodiscus alpinus*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus transilvanicus*  
*Stephanodiscus* spp. (our #5)  
*Stephanodiscus* spp. (our #14)  
*Surirella angusta*  
*Surirella ovata*  
*Synedra ostenfeldii*  
*Synedra rumpens*  
*Synedra rempensis* v. *scotia*  
*Synedra ulna*  
*Tabellaria fenestrata*

Sample DCAWLB, Slide #1

*Achnanthes clevei*  
*Achnanthes hungarica*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes linearis*  
*Achnanthes* spp.  
*Amphipleura pellucida*  
*Amphiprora ornata*  
*Amphora calumetica*  
*Amphora montana*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Amphora sibirica*  
*Asterionella formosa*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cocconeis disculus*  
*Cocconeis pediculus*  
*Cocconeis placentula*  
*Cyclotella comta*  
*Cyclotella meneghiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella pseudostelligera*  
*Cyclotella stelligera*  
*Cymatopleura solea*  
*Cymbella affinis*  
*Cymbella microcephala*  
*Cymbella naviculiformis*

*Cymbella prostrata*  
*Cymbella subventricosa*  
*Diatoma anceps*  
*Diatoma hiemale* v. *mesodon*  
*Diatoma tenue*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*  
*Diploneis parma*  
*Diploneis* spp.  
*Fragilaria capucina*  
*Fragilaria capucina* v. *mesolepta*  
*Fragilaria construens*  
*Fragilaria construens* v. *binodis*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria intermedia* v. *fallax*  
*Fragilaria pinnata*  
*Fragilaria pinnata* v. *lancettula*  
*Fragilaria vaucheriae*  
*Frustulia vulgaris*  
*Gomphonema angustatum*  
*Gomphonema constrictum*  
*Gomphonema lanceolata* v. *insignis*  
*Gomphonema olivaceodes*  
*Gomphonema olivaceum*  
*Gomphonema sphaerophorum*  
*Gomphonema* spp.  
*Hantzschia amphioxys*  
*Mastogloia smithii* v. *lacustris*  
*Melosira distans*

Table 6 con't. Diatom psammon, May 1972.

*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Meridion circulare*  
*Meridion circulare v. constrictum*  
*Navicula anglica v. subsalsa*  
*Navicula capitata*  
*Navicula capitata v. hungarica*  
*Navicula costulata*  
*Navicula cryptocephala v. intermedia*  
*Navicula decussis*  
*Navicula fracta*  
*Navicula gastrum*  
*Navicula heufleri*  
*Navicula integra*  
*Navicula latens*  
*Navicula menisculus v. upsaliensis*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula nyassensis fo. minor*  
*Navicula paludosa*  
*Navicula protracta*  
*Navicula pupula*  
*Navicula pupula v. rostrata*  
*Navicula reinhardtii*  
*Navicula scutelloides*  
*Navicula secreta v. apiculata*  
*Navicula seminuloides*  
*Navicula simplex*  
*Navicula stroesei*  
*Navicula submuralis*  
*Navicula terminata*  
*Navicula tripunctata*  
*Navicula tripunctata v. schizonemoides*  
*Navicula vanheurckii*  
*Navicula viridula*

*Navicula viridula v. rostellata*  
*Navicula wittrockii*  
*Navicula spp. (our #78)*  
*Navicula spp.*  
*Neidium dubium*  
*Nitzschia acicularis*  
*Nitzschia amphibia*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia dissipata v. media*  
*Nitzschia fonticola*  
*Nitzschia palea*  
*Nitzschia recta*  
*Nitzschia spiculoides*  
*Nitzschia spp. (our #1)*  
*Nitzschia spp. (our #2)*  
*Oestrupia zachariasii*  
*Opephora martyi*  
*Pinnularia globiceps v. krookei ?*  
*Rhizosolenia gracilis*  
*Rhoicosphenia curvata*  
*Stauroneis smithii*  
*Stephanodiscus alpinus*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus niagarae*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus transilvanicus*  
*Stephanodiscus spp. (our #5)*  
*Surirella angusta*  
*Surirella ovata*  
*Synedra incisa*  
*Synedra ostenfeldii*  
*Synedra ulna*  
*Tabellaria fenestrata*

Sample DCWLA, Slide #1

*Achnanthes affinis*  
*Achnanthes clevei*  
*Achnanthes conspicua*  
*Achnanthes exigua v. heterovalva*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata v. dubia*  
*Achnanthes lanceolata v. elliptica*  
*Achnanthes laurenburgiana*  
*Achnanthes pinnata*

*Amphora ovalis v. pediculus*  
*Amphora sibirica*  
*Asterionella formosa*  
*Cocconeis diminuta*  
*Cyclotella comta*  
*Cyclotella kützingiana v. planetophora*  
*Cyclotella meneghiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*

Table 6 con't. Diatom psammon, May 1972.

*Cyclotella stelligera*  
*Cymatopleura solea*  
*Cymbella prostrata*  
*Cymbella* spp. (our #6)  
*Diatoma tenue*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*  
*Dinobryon divergens*  
*Diploneis oculata*  
*Fragilaria capucina*  
*Fragilaria construens*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria pinnata*  
*Gomphonema olivaceum*  
*Gomphonema* spp.  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Navicula capitata*  
*Navicula cincta*  
*Navicula cryptocephala*  
*Navicula decussis*  
*Navicula gottlandica*  
*Navicula integra*  
*Navicula lacustris*  
*Navicula latens*  
*Navicula menisculus* v. *upsaliensis*  
*Navicula micropupula*  
*Navicula paludosa*  
*Navicula pseudoclementis*  
*Navicula pupula*

*Navicula pupula* v. *rostrata*  
*Navicula scutelloides*  
*Navicula seminuloides*  
*Navicula tripunctata*  
*Neidium dubium*  
*Nitzschia acicularis*  
*Nitzschia acuta*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia palea*  
*Nitzschia recta*  
*Nitzschia spiculoides*  
*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Oestrupia zachariasii*  
*Rhizosolenia eriensis*  
*Rhizosolenia gracilis*  
*Stephanodiscus alpinus*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus tenuis*  
*Stephanodiscus* spp. (our #5)  
*Stephanodiscus* spp. (our #14)  
*Surirella angusta*  
*Surirella ovata*  
*Synedra filiformis*  
*Synedra ostenfeldii*  
*Synedra ulna*  
*Tabellaria finestrata*

Sample DCWLB, Slide #1

*Achnanthes clevei*  
*Achnanthes clevei* v. *rostrata*  
*Achnanthes conspicua*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes lanceolata* v. *elliptica*  
*Achnanthes lanceolata* v. ?  
*Achnanthes laurenburgiana*  
*Amphiprora ornata*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Asterionella formosa*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cocconeis placentula*

*Cyclotella meneghiniana*  
*Cyclotella meneghiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella stelligera*  
*Cymatopleura solea*  
*Cymatopleura solea* v. *apiculata*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*  
*Dinobryon divergens*  
*Eunotia* spp. ?  
*Fragilaria capucina*  
*Fragilaria construens*  
*Fragilaria construens* v. *capitata*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*



Table 6 con't. Diatom psammon, May 1972.

*Fragilaria pinnata*  
*Fragilaria pinnata* v. *lanceolata*  
*Gomphonema intricatum* v. *pumila*  
*Gomphonema olivaceum*  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Navicula capitata* v. *hungarica*  
*Navicula capitata* v. *luneburgensis*  
*Navicula cryptocephala*  
*Navicula decussis*  
*Navicula gastrum*  
*Navicula gregaria*  
*Navicula heufleri*  
*Navicula lacustris*  
*Navicula latens*  
*Navicula menisculus*  
*Navicula menisculus* v. *upsaliensis*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula nyassensis* fo. *minor*  
*Navicula paludosa*  
*Navicula pupula*  
*Navicula seminuloides*  
*Navicula stroesei*  
*Navicula terminata*  
*Navicula vanheurckii*  
*Navicula ventralis* ?

*Navicula viridula* v. *rostellata*  
*Neidium dubium* f. *constrictum*  
*Nitzschia acicularis*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia palea*  
*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Oestrupia zachariasii*  
*Rhizosolenia eriensis*  
*Rhizosolenia gracilis*  
*Rhoicosphenia curvata*  
*Stephanodiscus alpinus*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus transilvanicus*  
*Stephanodiscus* spp. (our #5)  
*Surirella angusta*  
*Synedra filiformis*  
*Synedra ostenfeldii*  
*Synedra ulna*  
*Tabellaria fenestrata*  
 Unknown diatom species

Sample DCBWL, Slide #1

*Achnanthes clevei*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes lanceolata* v. *elliptica*  
*Achnanthes pinnata*  
*Amphora ovalis* v. *gracilis*  
*Amphora ovalis* v. *pediculus*  
*Amphora subcostulata*  
*Amphora* spp.  
*Asterionella formosa*  
*Caloneis ventricosa*  
*Cocconeis diminuta*  
*Cyclotella comta*  
*Cyclotella kützingiana* v. *planetophora*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella stelligera*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*

*Fragilaria capucina*  
*Fragilaria crotonensis*  
*Fragilaria intermedia* v. *fallax*  
*Fragilaria pinnata*  
*Gomphonema lanceolatum*  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Navicula aurora*  
*Navicula capitata*  
*Navicula decussis*  
*Navicula heufleri*  
*Navicula lacustris*  
*Navicula latens*  
*Navicula menisculus* v. *upsaliensis*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula nyassensis* fo. *minor*  
*Navicula pupula* v. *rostrata*

Table 6 con't. Diatom psammon, May 1972.

*Navicula scutelloides*  
*Navicula seminulum*  
*Navicula submuralis*  
*Navicula tripunctata*  
*Navicula viridula* v. *rostellata*  
*Navicula* spp.  
*Navicula* spp. (our #78)  
*Neidium* spp. (our #3)  
*Nitzschia acicularis*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia palea*

*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Rhizosolenia gracilis*  
*Stephanodiscus alpinus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus tenuis*  
*Stephanodiscus* spp.  
*Stephanodiscus* spp. (our #5)  
*Stephanodiscus* spp. (our #14)  
*Surirella ovata*  
*Synedra ostenfeldii*  
*Synedra ulna*  
*Tabellaria fenestrata*

Sample DCBWL B, Slide #1

*Achnanthes clevei*  
*Achnanthes conspicua*  
*Achnanthes detha*  
*Achnanthes lanceolata* v. *dubia*  
*Amphipleura pellucida*  
*Amphora neglecta*  
*Amphora ovalis* v. *pediculus*  
*Amphora subcostulata*  
*Asterionella formosa*  
*Caloneis ventricosa*  
*Cocconeis diminuta*  
*Cocconeis placentula* v. *euglypta*  
*Cyclotella comta*  
*Cyclotella meneghiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella stelligera*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*  
*Fragilaria capucina*  
*Fragilaria construens*  
*Fragilaria crotonensis*  
*Fragilaria pinnata*  
*Fragilaria pinnata* v. *intercedens*  
*Gomphonema angustatum*  
*Gomphonema olivaceum*  
*Melosira islandica*  
*Melosira italica*  
*Navicula bacillum*  
*Navicula capitata*  
*Navicula decussis*  
*Navicula diluviana*  
*Navicula menisculus* v. *upsaliensis*

*Navicula minima*  
*Navicula nyassensis* fo. *minor*  
*Navicula pupula* v. *rostrata*  
*Navicula scutelloides*  
*Navicula secreta* v. *apiculata*  
*Navicula seminulum* v. *hustedtii*  
*Navicula submuralis*  
*Navicula viridula* v. *rostellata*  
*Navicula* spp.  
*Navicula* spp.  
*Navicula* spp.  
*Navicula* spp. (our #78)  
*Nitzschia acicularis*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia* spp. (our #2)  
*Rhizosolenia gracilis*  
*Stephanodiscus alpinus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus* spp. (our #5)  
*Synedra ostenfeldii*  
*Synedra ulna*  
*Tabellaria fenestrata*

Table 7. Diatom psammon, August 1972

Master species list

<i>Achnanthes austriaca</i> v. <i>helvetica</i> (?)	<i>Fragilaria brevistriata</i>
<i>Achnanthes clevei</i>	<i>Fragilaria brevistriata</i> v. <i>inflata</i>
<i>Achnanthes clevei</i> v. <i>rostrata</i>	<i>Fragilaria capucina</i>
<i>Achnanthes dispar</i> aff. (?)	<i>Fragilaria capucina</i> v. <i>mesolepta</i>
<i>Achnanthes exigua</i> v. <i>heterovalva</i>	<i>Fragilaria construens</i>
<i>Achnanthes flexella</i>	<i>Fragilaria construens</i> v. <i>binodis</i>
<i>Achnanthes lanceolata</i>	<i>Fragilaria construens</i> v. <i>minuta</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Fragilaria crotonensis</i>
<i>Achnanthes lanceolata</i> v. <i>omissa</i>	<i>Fragilaria intermedia</i>
<i>Achnanthes linearis</i>	<i>Fragilaria intermedia</i> v. <i>fallax</i>
<i>Achnanthes minutissima</i>	<i>Fragilaria pinnata</i>
<i>Achnanthes pinnata</i>	<i>Fragilaria pinnata</i> v. <i>lancettula</i>
<i>Achnanthes</i> spp. (our #1)	<i>Fragilaria vaucheriae</i>
<i>Achnanthes</i> spp. (our #25)	<i>Fragilaria vaucheriae</i> v. <i>truncata</i>
<i>Amphiprora ornata</i>	<i>Gomphonema angustum</i>
<i>Amphora calumetica</i>	<i>Gomphonema intricatum</i>
<i>Amphora montana</i>	<i>Gomphonema olivaceum</i>
<i>Amphora ovalis</i>	<i>Gomphonema tergestinum</i>
<i>Amphora ovalis</i> v. <i>libyca</i>	<i>Hantzschia amphioxys</i>
<i>Amphora ovalis</i> v. <i>pediculus</i>	<i>Melosira granulata</i>
<i>Amphora siberica</i>	<i>Melosira islandica</i>
<i>Amphora subcostulata</i>	<i>Melosira italica</i>
<i>Amphora veneta</i>	<i>Meridion circulare</i> v. <i>constrictum</i>
<i>Asterionella formosa</i>	<i>Navicula anglica</i> v. <i>signata</i>
<i>Caloneis bacillum</i>	<i>Navicula anglica</i> v. <i>subsalsa</i>
<i>Caloneis bacillum</i> v. <i>lancettula</i>	<i>Navicula aurora</i>
<i>Caloneis lewisei</i>	<i>Navicula bacillum</i>
<i>Caloneis ventricosa</i> v. <i>minuta</i>	<i>Navicula capitata</i>
<i>Cocconeis diminuta</i>	<i>Navicula capitata</i> v. <i>luneburgensis</i>
<i>Cocconeis pediculus</i>	<i>Navicula cineta</i>
<i>Cocconeis placentula</i>	<i>Navicula clementis</i>
<i>Cyclotella comta</i>	<i>Navicula clementis</i> v. <i>quadrastigmata</i>
<i>Cyclotella cryptica</i>	<i>Navicula confervacea</i>
<i>Cyclotella meneghiniana</i>	<i>Navicula costulata</i>
<i>Cyclotella meneghiniana</i> v. <i>plana</i>	<i>Navicula cryptocephala</i>
<i>Cyclotella michiganiana</i>	<i>Navicula cryptocephala</i> v. <i>intermedia</i>
<i>Cyclotella ocellata</i>	<i>Navicula decussis</i>
<i>Cyclotella pseudostelligera</i>	<i>Navicula gastrum</i>
<i>Cyclotella stelligera</i>	<i>Navicula grümmei</i> v. <i>rostellata</i>
<i>Cyclotella temperei</i>	<i>Navicula heufleri</i>
<i>Cymatopleura solea</i>	<i>Navicula integra</i>
<i>Cymbella prostrata</i>	<i>Navicula lanceolata</i>
<i>Cymbella sinuata</i> fo. <i>minor</i>	<i>Navicula latens</i>
<i>Cymbella subventricosa</i>	<i>Navicula menisculus</i>
<i>Diatoma tenue</i>	<i>Navicula menisculus</i> v. <i>upsaliensis</i>
<i>Diatoma tenue</i> v. <i>elongatum</i>	<i>Navicula micropupula</i>
<i>Diatoma vulgare</i>	<i>Navicula minima</i>
<i>Diploneis parva</i>	<i>Navicula nyassensis</i> fo. <i>minor</i>
<i>Diploneis oculata</i>	<i>Navicula paasaensis</i> (?)

Table 7 con't. Diatom psammon, August 1972

*Navicula placentula*  
*Navicula protracta* v. *elliptica*  
*Navicula protracta* v. *subcapitata*  
*Navicula pseudoclementis*  
*Navicula pupula*  
*Navicula pupula* v. *rostrata*  
*Navicula radiosa* v. *tenella*  
*Navicula scutelloides*  
*Navicula secreta* v. *apiculata*  
*Navicula seminuloides*  
*Navicula seminulum*  
*Navicula seminulum* v. *intermedia*  
*Navicula simplex*  
*Navicula stroesei*  
*Navicula submuralis*  
*Navicula tantula*  
*Navicula terminata*  
*Navicula tripunctata*  
*Navicula tuscula* v. *minor*  
*Navicula vanheurckii*  
*Navicula viridula*  
*Navicula viridula* v. *rostellata*  
*Navicula* spp. (our #78)  
*Navicula* spp. (our #79)  
*Navicula* spp.  
*Neidium bisulcatum*  
*Neidium dubium*  
*Neidium dubium* fo. *constrictum*  
*Neidium* spp. (our #3)  
*Nitzschia acicularis*  
*Nitzschia acuta*  
*Nitzschia amphibia*  
*Nitzschia angustata* v. *acuta*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia denticula* v. *delognei*  
*Nitzschia dissipata*  
*Nitzschia dissipata* v. *media*

*Nitzschia fonticola*  
*Nitzschia kützingiana*  
*Nitzschia microcephala*  
*Nitzschia palea*  
*Nitzschia paleacea*  
*Nitzschia recta*  
*Nitzschia tryblionella* v. *levidensis*  
*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Oestrupia zachariasii*  
*Opephora martyi*  
*Pinnularia* spp. (our #10)  
*Pleurosigma* spp.  
*Rhizosolenia gracilis*  
*Rhoicosphenia curvata*  
*Stauroneis acutiuscula*  
*Stauroneis smithii*  
*Stephanodiscus alpinus*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus niagarae*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus transilvanicus*  
*Stephanodiscus* spp. (our #5)  
*Stephanodiscus* spp. (our #14)  
*Surirella angusta*  
*Surirella ovata*  
*Synedra delicatissima*  
*Synedra filiformis*  
*Synedra ostenfeldii*  
*Synedra rumpens* v. *fragilarioides*  
*Synedra ulna*  
*Tabellaria fenestrata*  
*Tropidoneis lepidoptera* v. *proboscidea*  
  
One unknown diatom species

Sample SAWL, Slide #2

*Achnanthes clevei*  
*Achnanthes clevei* v. *rostrata*  
*Achnanthes exigua* v. *heterovalva*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes lanceolata* v. *omissa*  
*Achnanthes linearis*  
*Achnanthes minutissima*

*Achnanthes pinnata*  
*Amphiprora ornata*  
*Amphora calumetica*  
*Amphora montana*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Amphora subcostulata*

Table 7 con't. Diatom psammon, August 1972

*Asterionella formosa*  
*Caloneis bacillum*  
*Caloneis bacillum v. lancettula*  
*Caloneis lewisei*  
*Caloneis ventricosa v. minuta*  
*Cocconeis diminuta*  
*Cocconeis pediculus*  
*Cyclotella comta*  
*Cyclotella cryptica*  
*Cyclotella meneghiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella temperei*  
*Cymatopleura solea*  
*Cymbella prostrata*  
*Cymbella sinuata fo. minor*  
*Cymbella subventricosa*  
*Diatoma tenue*  
*Diatoma tenue v. elongatum*  
*Diatoma vulgare*  
*Diploneis parma*  
*Diploneis oculata*  
*Fragilaria brevistriata*  
*Fragilaria capucina*  
*Fragilaria capucina v. mesolepta*  
*Fragilaria construens*  
*Fragilaria construens v. binodis*  
*Fragilaria construens v. minuta*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria pinnata*  
*Fragilaria pinnata v. lancettula*  
*Fragilaria vaucheriae*  
*Fragilaria vaucheriae v. truncata*  
*Gomphonema angustatum*  
*Gomphonema olivaceum*  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Meridion circulare v. constrictum*  
*Navicula anglica v. signata*  
*Navicula anglica v. subsalsa*  
*Navicula aurora*  
*Navicula bacillum*  
*Navicula capitata*  
*Navicula capitata v. luneburgensis*  
*Navicula clementis*  
*Navicula confervacea*  
*Navicula costulata*  
*Navicula decussis*

*Navicula gastrum*  
*Navicula grimmei v. rostellata*  
*Navicula heufleri*  
*Navicula integra*  
*Navicula latens*  
*Navicula menisculus v. upsaliensis*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula nyassensis fo. minor*  
*Navicula protracta v. elliptica*  
*Navicula protracta v. subcapitata*  
*Navicula pupula*  
*Navicula pupula v. rostrata*  
*Navicula radiosa v. tenella*  
*Navicula scutelloides*  
*Navicula secreta v. apiculata*  
*Navicula seminuloides*  
*Navicula seminulum v. intermedia*  
*Navicula simplex*  
*Navicula stroesei*  
*Navicula submuralis*  
*Navicula tripunctata*  
*Navicula tuscula v. minor*  
*Navicula vanheurnckii*  
*Navicula viridula*  
*Navicula viridula v. rostellata*  
*Navicula spp. (our #78)*  
*Navicula spp.*  
*Navicula spp.*  
*Neidium bisulcatum*  
*Neidium dubium*  
*Neidium dubium fo. constrictum*  
*Neidium spp. (our #3)*  
*Nitzschia acicularis*  
*Nitzschia acuta*  
*Nitzschia angustata v. acuta*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia dissipata v. media*  
*Nitzschia fonticola*  
*Nitzschia microcephala*  
*Nitzschia palea*  
*Nitzschia tryblionella v. levidensis*  
*Nitzschia spp. (our #1)*  
*Nitzschia spp. (our #2)*  
*Oestrupia zachariasii*  
*Opephora martyi*  
*Pleurosigma spp.*  
*Rhizosolenia gracilis*

Table 7 con't. Diatom psammon, August 1972

<i>Rhoicosphenia curvata</i>	<i>Stephanodiscus transilvanicus</i>
<i>Stauroneis acutiuscula</i>	<i>Stephanodiscus</i> spp. (our #5)
<i>Stauroneis smithii</i>	<i>Surirella angusta</i>
<i>Stephanodiscus alpinus</i>	<i>Surirella ovata</i>
<i>Stephanodiscus binderanus</i>	<i>Synedra delicatissima</i>
<i>Stephanodiscus hantzschii</i>	<i>Synedra ostenfeldii</i>
<i>Stephanodiscus minutus</i>	<i>Synedra ulna</i>
<i>Stephanodiscus subtilis</i>	<i>Tabellaria fenestrata</i>
<i>Stephanodiscus tenuis</i>	<i>Tropidoneis lepidoptera</i> v. <i>proboscidea</i>

Sample SWL, Slide #2

<i>Achnanthes austriaca</i> v. <i>helvetica</i> (?)	<i>Navicula menisculus</i> v. <i>upsaliensis</i>
<i>Achnanthes clevei</i>	<i>Navicula minima</i>
<i>Achnanthes flexella</i>	<i>Navicula nyassensis</i> fo. <i>minor</i>
<i>Achnanthes lanceolata</i>	<i>Navicula pseudoclementis</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Navicula pupula</i>
<i>Achnanthes lanceolata</i> v. <i>elliptica</i>	<i>Navicula pupula</i> v. <i>rostrata</i>
<i>Achnanthes subcostulata</i>	<i>Navicula radiosa</i> v. <i>tenella</i>
<i>Amphora ovalis</i> v. <i>libyca</i>	<i>Navicula scutelloides</i>
<i>Amphora ovalis</i> v. <i>pediculus</i>	<i>Navicula secreta</i> v. <i>apiculata</i>
<i>Caloneis ventricosa</i> v. <i>minuta</i>	<i>Navicula seminuloides</i>
<i>Cocconeis diminuta</i>	<i>Navicula seminulum</i>
<i>Cocconeis placentula</i>	<i>Navicula submuralis</i>
<i>Cyclotella comta</i>	<i>Navicula tantula</i>
<i>Cyclotella michiganiana</i>	<i>Navicula tuscula</i> fo. <i>minor</i>
<i>Cyclotella ocellata</i>	<i>Navicula viridula</i> v. <i>rostellata</i>
<i>Cyclotella stelligera</i>	<i>Navicula</i> spp. (our #78)
<i>Diatoma tenue</i> v. <i>elongatum</i>	<i>Navicula</i> spp. (our #79)
<i>Fragilaria capucina</i>	<i>Navicula</i> spp.
<i>Fragilaria construens</i>	<i>Navicula</i> spp.
<i>Fragilaria construens</i> v. <i>binodis</i>	<i>Neidium</i> spp. (our #3)
<i>Fragilaria crotonensis</i>	<i>Nitzschia acicularis</i>
<i>Fragilaria intermedia</i>	<i>Nitzschia amphibia</i>
<i>Fragilaria pinnata</i>	<i>Nitzschia confinis</i>
<i>Gomphonema angustatum</i>	<i>Nitzschia dissipata</i>
<i>Gomphonema olivaceum</i>	<i>Nitzschia fonticola</i>
<i>Melosira granulata</i>	<i>Nitzschia palea</i>
<i>Melosira islandica</i>	<i>Nitzschia recta</i>
<i>Navicula anglica</i> v. <i>subsalsa</i>	<i>Nitzschia</i> spp. (our #1)
<i>Navicula aurora</i>	<i>Nitzschia</i> spp. (our #2)
<i>Navicula capitata</i>	<i>Rhizosolenia gracilis</i>
<i>Navicula capitata</i> v. <i>luneburgensis</i>	<i>Rhoicosphenia curvata</i>
<i>Navicula clementis</i>	<i>Stephanodiscus alpinus</i>
<i>Navicula costulata</i>	<i>Stephanodiscus hantzschii</i>
<i>Navicula decussis</i>	<i>Stephanodiscus tenuis</i>
<i>Navicula heufleri</i>	<i>Surirella angusta</i>
<i>Navicula integra</i>	<i>Surirella ovata</i>
<i>Navicula latens</i>	<i>Synedra filiformis</i>

Table 7 con't. Diatom psammon, August 1972

*Synedra ostenfeldii*  
*Synedra ulna*

*Tabellaria fenestrata*  
 One unknown diatom species

Sample DCAWL, Slide #1

*Achnanthes clevei*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata v. dubia*  
*Achnanthes* spp. (our #1)  
*Amphora ovalis*  
*Amphora ovalis v. libyca*  
*Amphora ovalis v. pediculus*  
*Amphora subcostulata*  
*Asterionella formosa*  
*Caloneis ventricosa v. minuta*  
*Cocconeis diminuta*  
*Cyclotella comta*  
*Cyclotella meneghiniana*  
*Cyclotella meneghiniana v. plana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella pseudostelligera*  
*Cyclotella temperei*  
*Diatoma tenue v. elongatum*  
*Fragilaria brevistriata*  
*Fragilaria capucina*  
*Fragilaria crotonensis*  
*Fragilaria pinnata*  
*Gomphonema olivaceum*  
*Gomphonema tergestinum*  
*Hantzschia amphioxys*  
*Melosira granulata*  
*Melosira islandica*  
*Navicula bacillum*  
*Navicula capitata v. lunenburgensis*  
*Navicula clementis*  
*Navicula clementis v. quadristigmata*  
*Navicula costulata*  
*Navicula cryptocephala*  
*Navicula decussis*  
*Navicula gastrum*  
*Navicula heufleri*

*Navicula latens*  
*Navicula menisculus v. upsaliensis*  
*Navicula micropupula*  
*Navicula nyassensis* fo. minor  
*Navicula pupula*  
*Navicula radiosa v. tenella*  
*Navicula scutelloides*  
*Navicula secreta v. apiculata*  
*Navicula seminuloides*  
*Navicula seminulum*  
*Navicula submuralis*  
*Navicula tripunctata*  
*Navicula tuscula v. minor*  
*Navicula vanheurckii*  
*Navicula viridula v. rostellata*  
*Navicula* spp. (our #78)  
*Neidium dubium*  
*Nitzschia acicularis*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia palea*  
*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Oestrupia zachariasii*  
*Rhizosolenia gracilis*  
*Stephanodiscus alpinus*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus tenuis*  
*Stephanodiscus transilvanicus*  
*Surirella angusta*  
*Synedra delicatissima*  
*Synedra filiformis*  
*Synedra rumpens v. fragilarioides*  
*Synedra ulna*  
*Tabellaria fenestrata*

Table 7 con't. Diatom psammon, August 1972

Sample DCWL, Slide #1

<i>Achnanthes clevei</i>	<i>Navicula lanceolata</i>
<i>Achnanthes dispar</i> aff. (?)	<i>Navicula latens</i>
<i>Achnanthes lanceolata</i>	<i>Navicula menisculus</i> v. <i>upsaliensis</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Navicula micropupula</i>
<i>Achnanthes lanceolata</i> v. <i>elliptica</i>	<i>Navicula minima</i>
<i>Achnanthes</i> spp. (our #25)	<i>Navicula nyassensis</i> fo. <i>minor</i>
<i>Amphiprora ornata</i>	<i>Navicula pupula</i>
<i>Amphora ovalis</i>	<i>Navicula pupula</i> v. <i>rostrata</i>
<i>Amphora ovalis</i> v. <i>libyca</i>	<i>Navicula scutelloides</i>
<i>Amphora ovalis</i> v. <i>pediculus</i>	<i>Navicula secreta</i> v. <i>apiculata</i>
<i>Amphora subcostulata</i>	<i>Navicula seminulum</i>
<i>Asterionella formosa</i>	<i>Navicula stroesei</i>
<i>Caloneis ventricosa</i> v. <i>minuta</i>	<i>Navicula submuralis</i>
<i>Cocconeis diminuta</i>	<i>Navicula terminata</i>
<i>Cocconeis placentula</i>	<i>Navicula tripunctata</i>
<i>Cyclotella comta</i>	<i>Navicula viridula</i> v. <i>rostellata</i>
<i>Cyclotella cryptica</i>	<i>Navicula</i> spp. (our #78)
<i>Cyclotella meneghiniana</i>	<i>Nitzschia acicularis</i>
<i>Cyclotella ocellata</i>	<i>Nitzschia bacata</i>
<i>Cyclotella stelligera</i>	<i>Nitzschia confinis</i>
<i>Diatoma tenue</i> v. <i>elongatum</i>	<i>Nitzschia dissipata</i>
<i>Diploneis parva</i>	<i>Nitzschia fonticola</i>
<i>Fragilaria brevistriata</i> v. <i>inflata</i>	<i>Nitzschia palea</i>
<i>Fragilaria capucina</i>	<i>Nitzschia</i> spp. (our #1)
<i>Fragilaria construens</i> v. <i>binodis</i>	<i>Nitzschia</i> spp. (our #2)
<i>Fragilaria crotonensis</i>	<i>Pinnularia</i> spp. (our #10)
<i>Fragilaria intermedia</i>	<i>Rhizosolenia gracilis</i>
<i>Fragilaria pinnata</i>	<i>Rhoicosphenia curvata</i>
<i>Fragilaria vaucheriae</i>	<i>Stephanodiscus alpinus</i>
<i>Gomphonema intricatum</i>	<i>Stephanodiscus hantzschii</i>
<i>Gomphonema olivaceum</i>	<i>Stephanodiscus minutus</i>
<i>Melosira granulata</i>	<i>Stephanodiscus niagarae</i>
<i>Melosira islandica</i>	<i>Stephanodiscus subtilis</i>
<i>Melosira italica</i>	<i>Stephanodiscus tenuis</i>
<i>Navicula capitata</i>	<i>Surirella angusta</i>
<i>Navicula capitata</i> v. <i>luneburgensis</i>	<i>Surirella ovata</i>
<i>Navicula clementis</i>	<i>Synedra delicatissima</i>
<i>Navicula costulata</i>	<i>Synedra filiformis</i>
<i>Navicula decussis</i>	<i>Synedra ostenfeldii</i>
<i>Navicula heufleri</i>	<i>Synedra ulna</i>
<i>Navicula integra</i>	<i>Tabellaria fenestrata</i>

Sample NAWL, Slide #1

<i>Achnanthes clevei</i>	<i>Achnanthes lanceolata</i> v. <i>dubia</i>
<i>Achnanthes exigua</i> v. <i>heterovalva</i>	<i>Amphora ovalis</i>
<i>Achnanthes lanceolata</i>	<i>Amphora ovalis</i> v. <i>libyca</i>



Table 7 con't. Diatom psammon, August 1972

*Amphora ovalis* v. *pediculus*  
*Amphora subcostulata*  
*Asterionella formosa*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cocconeis placentula*  
*Cyclotella meneghiniana*  
*Cyclotella meneghiniana* v. *plana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella pseudostelligera*  
*Cyclotella stelligera*  
*Diatoma vulgare*  
*Diploneis oculata*  
*Fragilaria brevistriata*  
*Fragilaria capucina*  
*Fragilaria construens*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria pinnata*  
*Gomphonema angustatum*  
*Gomphonema olivaceum*  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Navicula bacillum*  
*Navicula costulata*  
*Navicula cryptocephala*  
*Navicula decussis*  
*Navicula heufleri*  
*Navicula latens*  
*Navicula meniscus* v. *upsaliensis*  
*Navicula micropupula*

*Navicula minima*  
*Navicula nyassensis* fo. *minor*  
*Navicula placentula*  
*Navicula pupula*  
*Navicula pupula* v. *rostrata*  
*Navicula scutelloides*  
*Navicula secreta* v. *apiculata*  
*Navicula seminuloides*  
*Navicula seminulum* v. *intermedia*  
*Navicula viridula*  
*Navicula viridula* v. *rostellata*  
*Navicula* spp. (our #78)  
*Navicula* spp.  
*Navicula* spp.  
*Nitzschia acicularis*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia kützingiana*  
*Nitzschia palea*  
*Nitzschia paleacea*  
*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Stauroneis acutiuscula*  
*Stephanodiscus alpinus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus* spp. (our #5)  
*Surirella ovata*  
*Synedra ulna*  
*Tabellaria fenestrata*

Sample NWL, Slide #1

*Achnanthes clevei*  
*Achnanthes clevei* v. *rostrata*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Asterionella formosa*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cyclotella comta*  
*Cyclotella meneghiniana*  
*Cyclotella meneghiniana* v. *plana*

*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella pseudostelligera*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*  
*Diploneis parma*  
*Fragilaria capucina*  
*Fragilaria construens* v. *binodis*  
*Fragilaria construens* v. *minuta*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria pinnata*  
*Gomphonema angustatum*

Table 7 con't. Diatom psammon, August 1972

*Gomphonema olivaceum*  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Navicula capitata*  
*Navicula costulata*  
*Navicula cincta*  
*Navicula cryptocephala v. intermedia*  
*Navicula decussis*  
*Navicula gastrum*  
*Navicula latens*  
*Navicula menisculus v. upsaliensis*  
*Navicula micropupula*  
*Navicula nyassensis fo. minor*  
*Navicula paasaensis (?)*  
*Navicula pupula*  
*Navicula scutelloides*  
*Navicula secreta v. apiculata*  
*Navicula seminuloides*  
*Navicula stroesei*  
*Navicula submuralis*  
*Navicula tripunctata*  
*Navicula viridula v. rostellata*

*Navicula* spp. (our #78)  
*Navicula* spp.  
*Nitzschia acicularis*  
*Nitzschia amphibia*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia recta*  
*Nitzschia palea*  
*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Rhizosolenia gracilis*  
*Rhoicosphenia curvata*  
*Stephanodiscus alpinus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus tenuis*  
*Stephanodiscus* spp. (our #14)  
*Surirella angustata*  
*Synedra filiformis*  
*Synedra delicatissima*  
*Synedra ulna*  
*Tabellaria fenestrata*

Sample NBWL, Slide #1

*Achnanthes clevei*  
*Achnanthes clevei v. rostrata*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata v. dubia*  
*Amphora ovalis*  
*Amphora ovalis v. libyca*  
*Amphora ovalis v. pediculus*  
*Amphora siberica*  
*Amphora veneta*  
*Asterionella formosa*  
*Cocconeis diminuta*  
*Cyclotella comta*  
*Cyclotella menezhiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella pseudostelligera*  
*Cyclotella stelligera*  
*Diatoma vulgare*  
*Diploneis parma*  
*Fragilaria capucina v. mesolepta*  
*Fragilaria construens v. binodis*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria intermedia v. fallax*

*Fragilaria pinnata*  
*Gomphonema olivaceum*  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Navicula costulata*  
*Navicula decussis*  
*Navicula heufleri*  
*Navicula latens*  
*Navicula menisculus*  
*Navicula menisculus v. upsaliensis*  
*Navicula minima*  
*Navicula nyassensis fo. minor*  
*Navicula pupula*  
*Navicula pupula v. rostrata*  
*Navicula scutelloides*  
*Navicula secreta v. apiculata*  
*Navicula seminuloides*  
*Navicula seminulum*  
*Navicula submuralis*  
*Navicula viridula*  
*Navicula viridula v. rostellata*  
*Navicula* spp. (our #78)  
*Navicula* spp.

Table 7 con't. Diatom psammon, August 1972

<i>Nitzschia acicularis</i>	<i>Stephanodiscus alpinus</i>
<i>Nitzschia bacata</i>	<i>Stephanodiscus hantzschii</i>
<i>Nitzschia confinis</i>	<i>Stephanodiscus subtilis</i>
<i>Nitzschia denticula</i> v. <i>delognei</i>	<i>Stephanodiscus tenuis</i>
<i>Nitzschia dissipata</i>	<i>Stephanodiscus</i> spp. (our #5)
<i>Nitzschia palea</i>	<i>Synedra delicatissima</i>
<i>Nitzschia</i> spp. (our #1)	<i>Synedra ostenfeldii</i>
<i>Nitzschia</i> spp. (our #2)	<i>Synedra ulna</i>
<i>Rhoicosphenia curvata</i>	<i>Tabellaria fenestrata</i>

Table 8. Diatom psammon, September 1972

Master species list

<i>Achnanthes affinis</i>	<i>Cocconeis diminuta</i>
<i>Achnanthes clevei</i>	<i>Cocconeis pediculus</i>
<i>Achnanthes clevei</i> v. <i>rostrata</i>	<i>Cocconeis placentula</i>
<i>Achnanthes exigua</i> v. <i>heterovalva</i>	<i>Coscinodiscus subsalsa</i>
<i>Achnanthes haukiana</i>	<i>Cyclotella comta</i>
<i>Achnanthes hungarica</i>	<i>Cyclotella cryptica</i>
<i>Achnanthes lanceolata</i>	<i>Cyclotella kutzingiana</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Cyclotella meneghiniana</i>
<i>Achnanthes lanceolata</i> v. <i>elliptica</i>	<i>Cyclotella meneghiniana</i> v. <i>plana</i>
<i>Achnanthes lanceolata</i> v. <i>robusta</i>	<i>Cyclotella michiganiana</i>
<i>Achnanthes linearis</i>	<i>Cyclotella ocellata</i>
<i>Achnanthes minutissima</i>	<i>Cyclotella pseudostelligera</i>
<i>Achnanthes pinnata</i>	<i>Cyclotella stelligera</i>
<i>Amphipleura pellucida</i>	<i>Cyclotella temperei</i>
<i>Amphiprora ornata</i>	<i>Cymatopleura solea</i>
<i>Amphora bullatoides</i>	<i>Cymbella cistula</i>
<i>Amphora calumetica</i>	<i>Cymbella prostrata</i>
<i>Amphora cruceferoides</i>	<i>Diatoma tenue</i>
<i>Amphora normani</i>	<i>Diatoma tenue</i> v. <i>elongatum</i>
<i>Amphora ovalis</i>	<i>Diatoma vulgare</i>
<i>Amphora ovalis</i> v. <i>gracilis</i>	<i>Dinobryon divergens</i>
<i>Amphora ovalis</i> v. <i>libyca</i>	<i>Diploneis oculata</i>
<i>Amphora ovalis</i> v. <i>pediculus</i>	<i>Diploneis parma</i>
<i>Amphora subcostulata</i>	<i>Diploneis</i> spp.
<i>Amphora veneta</i>	<i>Fragilaria brevistriata</i>
<i>Amphora veneta</i> v. <i>angularis</i>	<i>Fragilaria capucina</i>
<i>Amphora</i> spp.	<i>Fragilaria construens</i>
<i>Asterionella formosa</i>	<i>Fragilaria construens</i> v. <i>binodis</i>
<i>Caloneis bacillum</i>	<i>Fragilaria construens</i> v. <i>minuta</i>
<i>Caloneis schumanniana</i>	<i>Fragilaria construens</i> v. <i>subsalina</i>
<i>Caloneis ventricosa</i> v. <i>minuta</i>	<i>Fragilaria crotonensis</i>
<i>Caloneis ventricosa</i> v. <i>truncatula</i>	<i>Fragilaria intermedia</i>

Table 8 con't. Diatom psammon, September 1972

<i>Fragilaria leptostauron</i>	<i>Navicula tantula</i>
<i>Fragilaria pinnata</i>	<i>Navicula tripunctata</i>
<i>Fragilaria pinnata</i> v. <i>lancettula</i>	<i>Navicula tuscula</i>
<i>Fragilaria vaucheriae</i>	<i>Navicula tuscula</i> fo. <i>rostrata</i>
<i>Gomphonema angustatum</i>	<i>Navicula vanheurnckii</i>
<i>Gomphonema olivaceum</i>	<i>Navicula ventralis</i>
<i>Gomphonema subclavatum</i>	<i>Navicula viridula</i>
<i>Gomphonema</i> spp.	<i>Navicula viridula</i> v. <i>linearis</i>
<i>Melosira granulata</i>	<i>Navicula viridula</i> v. <i>rostellata</i>
<i>Melosira islandica</i>	<i>Navicula vulpina</i>
<i>Melosira italica</i>	<i>Navicula</i> spp. (our #78)
<i>Meridion circulare</i> v. <i>constrictum</i>	<i>Navicula</i> spp. (our #79)
<i>Navicula anglica</i> v. <i>signata</i>	<i>Navicula</i> spp. (our #1)
<i>Navicula anglica</i> v. <i>subsalina</i>	<i>Navicula</i> spp. (our #2)
<i>Navicula anglica</i> v. <i>subsalsa</i>	<i>Neidium affine</i> v. <i>hankense</i>
<i>Navicula aurora</i>	<i>Neidium bisulacatum</i>
<i>Navicula bacillum</i>	<i>Neidium dubium</i>
<i>Navicula capitata</i>	<i>Neidium dubium</i> fo. <i>constrictum</i>
<i>Navicula capitata</i> v. <i>luneburgensis</i>	<i>Neidium</i> spp. (our #3)
<i>Navicula cinta</i>	<i>Neidium</i> spp. (our #5)
<i>Navicula clementis</i>	<i>Nitzschia acicularis</i>
<i>Navicula costulata</i>	<i>Nitzschia acuta</i>
<i>Navicula cryptocephala</i>	<i>Nitzschia amphibia</i>
<i>Navicula decussis</i>	<i>Nitzschia amphibia</i> v. <i>fossilis</i>
<i>Navicula exiguaformis</i>	<i>Nitzschia angustata</i> v. <i>acuta</i>
<i>Navicula explanata</i>	<i>Nitzschia bacata</i>
<i>Navicula gastrum</i> v. <i>signata</i>	<i>Nitzschia capitellata</i>
<i>Navicula heufleri</i>	<i>Nitzschia communis</i>
<i>Navicula lanceolata</i>	<i>Nitzschia confinis</i>
<i>Navicula latens</i>	<i>Nitzschia dissipata</i>
<i>Navicula menisculus</i>	<i>Nitzschia fonticola</i>
<i>Navicula menisculus</i> v. <i>upsaliensis</i>	<i>Nitzschia frustulum</i> v. <i>subsalina</i>
<i>Navicula micropupula</i>	<i>Nitzschia frustulum</i> v. <i>perminuta</i>
<i>Navicula minima</i>	<i>Nitzschia gracilis</i>
<i>Navicula minima</i> v. <i>okamurae</i>	<i>Nitzschia insecta</i>
<i>Navicula nyassensis</i> fo. <i>minor</i>	<i>Nitzschia kützingiana</i>
<i>Navicula paludosa</i>	<i>Nitzschia macilenta</i>
<i>Navicula platystoma</i> v. <i>pantoseckii</i>	<i>Nitzschia microcephala</i>
<i>Navicula protracta</i>	<i>Nitzschia palea</i>
<i>Navicula protracta</i> v. <i>elliptica</i>	<i>Nitzschia recta</i>
<i>Navicula pupula</i>	<i>Nitzschia spiculoides</i>
<i>Navicula pupula</i> v. <i>mutata</i>	<i>Nitzschia</i> spp. (our #1)
<i>Navicula radiosa</i>	<i>Nitzschia</i> spp. (our #2)
<i>Navicula radiosa</i> v. <i>tenella</i>	<i>Nitzschia</i> spp. (our #10)
<i>Navicula scutelloides</i>	<i>Nitzschia</i> spp.
<i>Navicula seminuloides</i>	<i>Oestrupia zachariasii</i>
<i>Navicula seminulum</i>	<i>Rhizosolenia gracilis</i>
<i>Navicula seminulum</i> v. <i>intermedia</i>	<i>Rhoicosphenia curvata</i>
<i>Navicula simplex</i>	<i>Stauroneis acutiuscula</i>
<i>Navicula submuralis</i>	<i>Stephanodiscus alpinus</i>

Table 8 con't. Diatom psammon, September 1972

*Stephanodiscus astraea*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus niagarae*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus transilvanicus*  
*Stephanodiscus* spp. (our #5)  
*Surirella angusta*  
*Surirella ovata*

*Synedra acus*  
*Synedra amphicephala*  
*Synedra delicatissima*  
*Synedra delicatissima* v. *angustissima*  
*Synedra demerarae*  
*Synedra filiformis*  
*Synedra minuscula*  
*Synedra ostenfeldii*  
*Synedra parasitica* v. *subconstricta*  
*Synedra ulna*  
*Tabellaria fenestrata*  
*Tabellaria flocculosa*

Sample SAWL, Slide #1

*Achnanthes clevei*  
*Achnanthes hungarica*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes lanceolata* v. *robusta*  
*Amphora bullatoides*  
*Amphora calumetica*  
*Amphora cruciferoides*  
*Amphora normani*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Amphora veneta*  
*Asterionella formosa*  
*Caloneis ventricosa* v. *truncatula*  
*Cocconeis diminuta*  
*Cocconeis pediculus*  
*Cocconeis placentula*  
*Coscinodiscus subsalsa*  
*Cyclotella comta*  
*Cyclotella cryptica*  
*Cyclotella kutzingiana*  
*Cyclotella meneghiniana*  
*Cyclotella meneghiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella pseudostelligera*  
*Cyclotella stelligera*  
*Cymatopleura solea*  
*Cymbella prostrata*  
*Diploneis oculata*  
*Diploneis parva*  
*Fragilaria breviatriata*

*Fragilaria capucina*  
*Fragilaria construens*  
*Fragilaria crotonensis*  
*Fragilaria pinnata* v. *lancettula*  
*Fragilaria vaucheriae*  
*Gomphonema angustatum*  
*Gomphonema olivaceum*  
*Gomphonema subclavatum*  
*Melosira granulata*  
*Melosira granulata* v. *angustissima*  
*Melosira islandica*  
*Melosira italica*  
*Navicula bacillum*  
*Navicula capitata*  
*Navicula capitata* v. *luneburgensis*  
*Navicula costulata*  
*Navicula decussis*  
*Navicula exiguaformis*  
*Navicula explanata*  
*Navicula gastrum* v. *signata*  
*Navicula heufleri*  
*Navicula lanceolata*  
*Navicula latens*  
*Navicula meniscus* v. *upsaliensis*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula nyassensis* fo. *minor*  
*Navicula protracta*  
*Navicula pupula*  
*Navicula pupula* v. *mutata*  
*Navicula scutelloides*  
*Navicula seminuloides*  
*Navicula seminulum*

Table 8 con't. Diatom psammon, September 1972

*Navicula simplex*  
*Navicula tuscula* fo. *rostrata*  
*Navicula vanheurckii*  
*Navicula viridula* v. *rostellata*  
*Navicula vulpina*  
*Navicula* spp. (our #78)  
*Navicula* spp.  
*Neidium affine* v. *hankense*  
*Neidium dubium*  
*Nitzschia amphibia*  
*Nitzschia angustata* v. *acuta*  
*Nitzschia bacata*  
*Nitzschia capitellata*  
*Nitzschia communis*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia gracilis*  
*Nitzschia kützingiana*  
*Nitzschia macilentia*  
*Nitzschia microcephala*  
*Nitzschia spiculoides*

*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Nitzschia* spp.  
*Rhizosolenia gracilis*  
*Rhoicosphenia curvata*  
*Stephanodiscus astraea*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus niagarae*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus transilvanicus*  
*Stephanodiscus* spp. (our #5)  
*Surirella angusta*  
*Synedra acus*  
*Synedra delicatissima*  
*Synedra delicatissima* v. *angustissima*  
*Synedra demerarae*  
*Synedra filiformis*  
*Synedra parasitica* v. *subconstricta*  
*Tabellaria fenestrata*

Sample NAWL, Slide #1

*Achnanthes clevei*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes pinnata*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Amphora subcostulata*  
*Asterionella formosa*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cymatopleura solea*  
*Cyclotella comta*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella pseudostelligera*  
*Diploneis* spp.  
*Fragilaria construens*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria pinnata*  
*Fragilaria vaucheriae*

*Gomphonema olivaceum*  
*Melosira granulata*  
*Melosira islandica*  
*Navicula anglica* v. *signata*  
*Navicula capitata* v. *luneburgensis*  
*Navicula costulata*  
*Navicula cryptocephala*  
*Navicula decussis*  
*Navicula heufleri*  
*Navicula latens*  
*Navicula menisculus* v. *upsaliensis*  
*Navicula minima*  
*Navicula nyassensis* f. *minor*  
*Navicula protracta* v. *subcapitata*  
*Navicula pupula*  
*Navicula pupula* v. *rostrata*  
*Navicula scutelloides*  
*Navicula seminuloides*  
*Navicula seminulum* v. *intermedia*  
*Navicula submuralis*  
*Navicula viridula* v. *rostellata*  
*Navicula* spp. (our #78)

Table 8 con't. Diatom psammon, September 1972

*Neidium bisulcatum*  
*Neidium* spp. (our #3)  
*Nitzschia acicularis*  
*Nitzschia angustata* v. *acuta*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia palea*  
*Nitzschia recta*  
*Nitzschia* spp. (our #2)

*Stephanodiscus alpinus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus tenuis*  
*Stephanodiscus subtilis*  
*Stephanodiscus* spp. (our #5)  
*Synedra delicatissima*  
*Synedra filiformis*  
*Synedra ostenfeldii*  
*Synedra ulna*  
*Tabellaria fenestrata*

Sample DCAWL, Slide #1

*Achnanthes clevei*  
*Achnanthes clevei* v. *rostrata*  
*Achnanthes exigua* v. *heterovalva*  
*Achnanthes hungarica*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Amphipleura pellucida*  
*Amphiprora ornata*  
*Amphora calumetica*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Amphora subcostulata*  
*Amphora veneta*  
*Amphora veneta* v. *angularis*  
*Asterionella formosa*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cocconeis pediculus*  
*Cocconeis placentula*  
*Cyclotella comta*  
*Cyclotella cryptica*  
*Cyclotella meneghiniana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella pseudostelligera*  
*Cyclotella stelligera*  
*Cyclotella temperei*  
*Cymatopleura solea*  
*Cymbella prostrata*  
*Diatoma tenue*  
*Diatoma tneue* v. *elongatum*  
*Diatoma vulgare*  
*Dinobryon divergens*  
*Diploneis parma*

*Diploneis* spp.  
*Fragilaria capucina*  
*Fragilaria construens*  
*Fragilaria construens* v. *binodis*  
*Fragilaria construens* v. *minuta*  
*Fragilaria construens* v. *subsalina*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria leptostauron*  
*Fragilaria pinnata*  
*Fragilaria vaucheriae*  
*Gomphonema olivaceum*  
*Melosira granulata*  
*Melosira islandica*  
*Melosira italica*  
*Navicula aurora*  
*Navicula bacillum*  
*Navicula capitata* v. *luneburgensis*  
*Navicula clementis*  
*Navicula costulata*  
*Navicula decussis*  
*Navicula heufleri*  
*Navicula latens*  
*Navicula menisculus* v. *upsaliensis*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula nyassensis* fo. *minor*  
*Navicula platystoma* v. *pantoseckii*  
*Navicula protracta* v. *elliptica*  
*Navicula pupula*  
*Navicula radiosa*  
*Navicula radiosa* v. *tenella*  
*Navicula scutelloides*  
*Navicula seminuloides*  
*Navicula seminulum* v. *intermedia*

Table 8 con't. Diatom psammon, September 1972

<i>Navicula submuralis</i>	<i>Nitzschia</i> spp. (our #1)
<i>Navicula tripunctata</i>	<i>Nitzschia</i> spp. (our #2)
<i>Navicula vanheurnkii</i>	<i>Nitzschia</i> spp. (our #10)
<i>Navicula ventralis</i>	<i>Nitzschia</i> spp.
<i>Navicula viridula</i> v. <i>rostellata</i>	<i>Oestrupia zachariasii</i>
<i>Navicula</i> spp. (our #78)	<i>Rhizosolenia gracilis</i>
<i>Navicula</i> spp. (our #79)	<i>Stephanodiscus alpinus</i>
<i>Neidium bisulcatum</i>	<i>Stephanodiscus astraia</i>
<i>Neidium dubium</i>	<i>Stephanodiscus binderanus</i>
<i>Neidium dubium</i> fo. <i>constrictum</i>	<i>Stephanodiscus hantzschii</i>
<i>Neidium</i> spp. (our #3)	<i>Stephanodiscus subtilis</i>
<i>Nitzschia acicularis</i>	<i>Stephanodiscus tenuis</i>
<i>Nitzschia amphibia</i>	<i>Surirella angusta</i>
<i>Nitzschia amphibia</i> v. <i>fossilis</i>	<i>Surirella ovata</i>
<i>Nitzschia angustata</i> v. <i>acuta</i>	<i>Synedra delicatissima</i>
<i>Nitzschia bacata</i>	<i>Synedra filiformis</i>
<i>Nitzschia confinis</i>	<i>Synedra ostensfeldii</i>
<i>Nitzschia dissipata</i>	<i>Synedra ulna</i>
<i>Nitzschia fonticola</i>	<i>Tabellaria fenestrata</i>
<i>Nitzschia frustulum</i> fo. <i>subsalina</i>	<i>Tabellaria flocculosa</i>
<i>Nitzschia palea</i>	
<i>Nitzschia recta</i>	One unknown diatom species

Sample DCWL, Slide #1

<i>Achnanthes clevei</i>	<i>Navicula latens</i>
<i>Achnanthes lanceolata</i>	<i>Navicula meniscus</i> v. <i>upsaliensis</i>
<i>Achnanthes lanceolata</i> v. <i>robusta</i>	<i>Navicula nyassensis</i> fo. <i>minor</i>
<i>Achnanthes pinnata</i>	<i>Navicula seminuloides</i>
<i>Amphora</i> spp.	<i>Navicula viridula</i> v. <i>linearis</i>
<i>Asterionella formosa</i>	<i>Neidium</i> spp. (our #5)
<i>Caloneis bacillum</i>	<i>Nitzschia palea</i>
<i>Cyclotella comta</i>	<i>Nitzschia</i> spp. (our #2)
<i>Cyclotella cryptica</i>	<i>Stephanodiscus alpinus</i>
<i>Cymbella cistula</i>	<i>Synedra delicatissima</i> v. <i>angustissima</i>
<i>Fragilaria crotonensis</i>	<i>Synedra demerarae</i>
<i>Gomphonema olivaceum</i>	<i>Synedra filiformis</i>
<i>Melosira granulata</i>	<i>Synedra parasitica</i> v. <i>subconstricta</i>
<i>Melosira italica</i>	<i>Tabellaria fenestrata</i>
<i>Navicula decussis</i>	

Sample SWL, Slide #1

<i>Achnanthes clevei</i>	<i>Amphora ovalis</i>
<i>Achnanthes clevei</i> v. <i>rostrata</i>	<i>Amphora ovalis</i> v. <i>gracilis</i>
<i>Achnanthes haukiana</i>	<i>Amphora ovalis</i> v. <i>libyca</i>
<i>Achnanthes lanceolata</i>	<i>Amphora ovalis</i> v. <i>pediculus</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Asterionella formosa</i>
<i>Achnanthes lanceolata</i> v. <i>robusta</i>	<i>Caloneis ventricosa</i> v. <i>minuta</i>
<i>Achnanthes minutissima</i>	<i>Cocconeis diminuta</i>



Table 8 con't. Diatom psammon, September 1972

<i>Cocconeis placentula</i>	<i>Navicula tantula</i>
<i>Cyclotella comta</i>	<i>Navicula tuscula</i>
<i>Cyclotella meneghiniana</i>	<i>Navicula</i> spp. (our #78)
<i>Cyclotella michiganiana</i>	<i>Navicula</i> spp. 1
<i>Cyclotella ocellata</i>	<i>Navicula</i> spp. 2
<i>Cyclotella stelligera</i>	<i>Nitzschia acuta</i>
<i>Cymatopleura solea</i>	<i>Nitzschia bacata</i>
<i>Fragilaria capucina</i>	<i>Nitzschia confinis</i>
<i>Fragilaria crotonensis</i>	<i>Nitzschia dissipata</i>
<i>Fragilaria pinnata</i>	<i>Nitzschia fonticola</i>
<i>Fragilaria vaucheriae</i>	<i>Nitzschia frustulum</i> v. <i>perminuta</i>
<i>Gomphonema angustatum</i>	<i>Nitzschia microcephala</i>
<i>Melosira granulata</i>	<i>Nitzschia palea</i>
<i>Melosira islandica</i>	<i>Nitzschia recta</i>
<i>Meridion circulare</i> v. <i>constrictum</i>	<i>Nitzschia</i> spp. (our #1)
<i>Navicula capitata</i> v. <i>luneburgensis</i>	<i>Stephanodiscus astraes</i>
<i>Navicula cinta</i>	<i>Stephanodiscus hantzschii</i>
<i>Navicula decussis</i>	<i>Stephanodiscus minutus</i>
<i>Navicula gastrum</i> v. <i>signata</i>	<i>Stephanodiscus niagarae</i>
<i>Navicula latens</i>	<i>Stephanodiscus subtilis</i>
<i>Navicula menisculus</i>	<i>Surirella angusta</i>
<i>Navicula menisculus</i> v. <i>upsaliensis</i>	<i>Synedra delicatissima</i> v. <i>angustissima</i>
<i>Navicula nyassensis</i> fo. <i>minor</i>	<i>Synedra demerarae</i>
<i>Navicula pupula</i>	<i>Synedra minuscula</i>
<i>Navicula seminulum</i>	<i>Synedra ulna</i>
<i>Navicula submuralis</i>	<i>Tabellaria fenestrata</i>

Sample NWLA, Slide #1

<i>Achnanthes lanceolata</i>	<i>Navicula menisculus</i> v. <i>upsaliensis</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Navicula nyassensis</i> fo. <i>minor</i>
<i>Achnanthes pinnata</i>	<i>Navicula scutelloides</i>
<i>Amphora ovalis</i>	<i>Navicula seminuloides</i>
<i>Amphora ovalis</i> v. <i>pediculus</i>	<i>Navicula submuralis</i>
<i>Amphora subcostulata</i>	<i>Navicula viridula</i> v. <i>rostellata</i>
<i>Caloneis ventricosa</i> v. <i>minuta</i>	<i>Navicula</i> spp. (our #78)
<i>Cocconeis diminuta</i>	<i>Neidium bisulcatum</i>
<i>Cyclotella comta</i>	<i>Nitzschia dissipata</i>
<i>Cyclotella meneghiniana</i>	<i>Nitzschia fonticola</i>
<i>Navicula capitata</i> v. <i>luneburgensis</i>	<i>Nitzschia palea</i>
<i>Navicula decussis</i>	<i>Stephanodiscus alpinus</i>
<i>Navicula heufleri</i>	<i>Stephanodiscus tenuis</i>
<i>Navicula latens</i>	<i>Tabellaria fenestrata</i>

Sample SBWL, Slide #2

<i>Achnanthes clevei</i>	<i>Achnanthes pinnata</i>
<i>Achnanthes hungarica</i>	<i>Amphora ovalis</i>
<i>Achnanthes lanceolata</i>	<i>Amphora ovalis</i> v. <i>libyca</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Amphora ovalis</i> v. <i>pediculus</i>
<i>Achnanthes lanceolata</i> v. <i>elliptica</i>	<i>Amphora veneta</i>

Table 8 con't. Diatom psammon, September 1972

<i>Asterionella formosa</i>	<i>Navicula protracta</i>
<i>Caloneis schumanniana</i>	<i>Navicula pupula</i>
<i>Cocconeis diminuta</i>	<i>Navicula seminuloides</i>
<i>Cymatopleura solea</i>	<i>Navicula seminulum</i>
<i>Fragilaria crotonensis</i>	<i>Navicula submuralis</i>
<i>Fragilaria pinnata</i>	<i>Navicula viridula</i>
<i>Fragilaria vaucheriae</i>	<i>Neidium dubium</i>
<i>Gomphonema angustatum</i>	<i>Nitzschia amphibia</i>
<i>Gomphonema olivaceum</i>	<i>Nitzschia dissipata</i>
<i>Gomphonema</i> spp.	<i>Nitzschia fonticola</i>
<i>Melosira granulata</i>	<i>Nitzschia frustulum</i> v. <i>subsalina</i>
<i>Melosira islandica</i>	<i>Nitzschia microcephala</i>
<i>Melosira italica</i>	<i>Nitzschia recta</i>
<i>Navicula anglica</i> v. <i>subsalsa</i>	<i>Stephanodiscus hantzschii</i>
<i>Navicula cryptocephala</i>	<i>Stephanodiscus minutus</i>
<i>Navicula decussis</i>	<i>Stephanodiscus niagarae</i>
<i>Navicula exiguaformis</i>	<i>Stephanodiscus subtilis</i>
<i>Navicula latens</i>	<i>Stephanodiscus tenuis</i>
<i>Navicula menisculus</i>	<i>Surirella angusta</i>
<i>Navicula menisculus</i> v. <i>upsaliensis</i>	<i>Synedra amphicephala</i>
<i>Navicula micropupula</i>	<i>Synedra delicatissima</i> v. <i>angustissima</i>
<i>Navicula nyassensis</i> fo. <i>minor</i>	<i>Tabellaria fenestrata</i>

Sample DCBWL, Slide #1

<i>Achnanthes affinis</i>	<i>Navicula paludosa</i>
<i>Achnanthes clevei</i>	<i>Navicula pupula</i>
<i>Achnanthes lanceolata</i>	<i>Navicula seminuloides</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Navicula seminulum</i>
<i>Achnanthes lanceolata</i> v. <i>robusta</i>	<i>Navicula viridula</i>
<i>Achnanthes linearis</i>	<i>Navicula</i> spp. (our #78)
<i>Amphora ovalis</i>	<i>Navicula</i> spp.
<i>Amphora ovalis</i> v. <i>libyca</i>	<i>Neidium dubium</i>
<i>Amphora ovalis</i> v. <i>pediculus</i>	<i>Nitzschia acuta</i>
<i>Asterionella formosa</i>	<i>Nitzschia fonticola</i>
<i>Cyclotella comta</i>	<i>Nitzschia insecta</i>
<i>Cyclotella kützingiana</i>	<i>Nitzschia kützingiana</i>
<i>Cyclotella michiganiana</i>	<i>Nitzschia macilenta</i>
<i>Cyclotella ocellata</i>	<i>Nitzschia microcephala</i>
<i>Fragilaria construens</i>	<i>Nitzschia palea</i>
<i>Melosira granulata</i>	<i>Nitzschia</i> spp. (our #2)
<i>Navicula anglica</i> v. <i>signata</i>	<i>Stauroneis acutiuscula</i>
<i>Navicula anglica</i> v. <i>subsalsa</i>	<i>Stephanodiscus alpinus</i>
<i>Navicula cryptocephala</i>	<i>Stephanodiscus binderanus</i>
<i>Navicula decussis</i>	<i>Stephanodiscus hantzschii</i>
<i>Navicula heufleri</i>	<i>Stephanodiscus minutus</i>
<i>Navicula latens</i>	<i>Stephanodiscus subtilis</i>
<i>Navicula menisculus</i> v. <i>upsaliensis</i>	<i>Synedra delicatissima</i>
<i>Navicula minima</i>	<i>Synedra filiformis</i>
<i>Navicula minima</i> v. <i>okamurae</i>	<i>Synedra ulna</i>
<i>Navicula nyassensis</i> fo. <i>minor</i>	<i>Tabellaria fenestrata</i>

Table 8 con't. Diatom psammon, September 1972.

Sample NBWL, Slide #1

<i>Achnanthes clevei</i>	<i>Navicula aurora</i>
<i>Achnanthes clevei</i> v. <i>rostrata</i>	<i>Navicula capitata</i> v. <i>luneburgensis</i>
<i>Achnanthes hungarica</i>	<i>Navicula decussis</i>
<i>Achnanthes lanceolata</i>	<i>Navicula heufleri</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Navicula latens</i>
<i>Achnanthes pinnata</i>	<i>Navicula menisculus</i> v. <i>upsaliensis</i>
<i>Amphora ovalis</i>	<i>Navicula micropupula</i>
<i>Amphora ovalis</i> v. <i>libyca</i>	<i>Navicula nyassensis</i> fo. <i>minor</i>
<i>Amphora ovalis</i> v. <i>pediculus</i>	<i>Navicula radiosa</i> v. <i>tenella</i>
<i>Amphora subcostulata</i>	<i>Navicula scutelloides</i>
<i>Caloneis ventricosa</i> v. <i>minuta</i>	<i>Navicula seminuloides</i>
<i>Cocconeis diminuta</i>	<i>Navicula viridula</i> v. <i>rostellata</i>
<i>Cyclotella comta</i>	<i>Navicula</i> spp. (our #78)
<i>Cyclotella ocellata</i>	<i>Nitzschia confinis</i>
<i>Cyclotella pseudostelligera</i>	<i>Nitzschia dissipata</i>
<i>Diploneis parma</i>	<i>Nitzschia fonticola</i>
<i>Diploneis</i> spp.	<i>Nitzschia palea</i>
<i>Fragilaria crotonensis</i>	<i>Nitzschia</i> spp. (our #2)
<i>Fragilaria pinnata</i>	<i>Stephanodiscus alpinus</i>
<i>Fragilaria vaucheriae</i>	<i>Stephanodiscus hantzschii</i>
<i>Gomphonema angustatum</i>	<i>Surirella angusta</i>
<i>Melosira granulata</i>	<i>Tabellaria fenestrata</i>
<i>Navicula anglica</i> v. <i>subsalina</i>	

Table 9 . Diatom psammon, November 1972.

Master species list

<i>Achnanthes affinis</i>	<i>Cymatopleura solea</i> v. <i>apiculata</i>
<i>Achnanthes clevei</i>	<i>Cymbella affinis</i>
<i>Achnanthes clevei</i> v. <i>rostrata</i>	<i>Cymbella cystula</i>
<i>Achnanthes exigua</i>	<i>Cymbella microcephala</i>
<i>Achnanthes exigua</i> v. <i>constricta</i>	<i>Cymbella obtusiuscula</i>
<i>Achnanthes haukiana</i> v. <i>rostrata</i>	<i>Cymbella prostrata</i>
<i>Achnanthes hungarica</i>	<i>Cymbella sinuata</i>
<i>Achnanthes kryophila</i>	<i>Cymbella subventricosa</i>
<i>Achnanthes lanceolata</i>	<i>Cymbella turgida</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Diatoma tenue</i> v. <i>elongatum</i>
<i>Achnanthes lanceolata</i> v. <i>elliptica</i>	<i>Diatoma vulgare</i>
<i>Achnanthes lanceolata</i> v. <i>robusta</i>	<i>Diatoma vulgare</i> v. <i>breve</i>
<i>Achnanthes linearis</i>	<i>Dinobryon sociale</i>
<i>Achnanthes microcephala</i>	<i>Dinobryon</i> spp.
<i>Achnanthes minutissima</i>	<i>Diploneis oculata</i>
<i>Achnanthes peragalli</i>	<i>Diploneis parma</i>
<i>Achnanthes ploenensis</i>	<i>Fragilaria brevestriata</i> v. <i>inflata</i>
<i>Achnanthes</i> spp.	<i>Fragilaria capucina</i>
<i>Amphipleura pellucida</i>	<i>Fragilaria construens</i>
<i>Amphora calumetica</i>	<i>Fragilaria construens</i> v. <i>binodis</i>
<i>Amphora fonticola</i>	<i>Fragilaria construens</i> v. <i>capitata</i>
<i>Amphora hemicycla</i>	<i>Fragilaria construens</i> v. <i>pumila</i>
<i>Amphora ovalis</i>	<i>Fragilaria construens</i> v. <i>venter</i>
<i>Amphora ovalis</i> v. <i>gracilis</i>	<i>Fragilaria crotonensis</i>
<i>Amphora ovalis</i> v. <i>libyca</i>	<i>Fragilaria delicatissima</i>
<i>Amphora ovalis</i> v. <i>pediculus</i>	<i>Fragilaria intermedia</i>
<i>Amphora rotunda</i>	<i>Fragilaria leptostauron</i> v. <i>dubia</i>
<i>Amphora sibirica</i>	<i>Fragilaria pantoscekii</i> v. <i>binodis</i>
<i>Amphora subconstricta</i>	<i>Fragilaria pinnata</i>
<i>Amphora subcostulata</i>	<i>Fragilaria pinnata</i> v. <i>lancettula</i>
<i>Asterionella formosa</i>	<i>Fragilaria pinnata</i> v. <i>minuta</i>
<i>Caloneis bacillaris</i> v. <i>thermalis</i>	<i>Fragilaria pinnata</i> v. <i>venter</i>
<i>Caloneis bacillum</i>	<i>Fragilaria vaucheriae</i>
<i>Caloneis ventricosa</i> v. <i>minuta</i>	<i>Fragilaria vaucheriae</i> v. <i>lanceolata</i>
<i>Cocconeis diminuta</i>	<i>Frustulia rhomboides</i> v. <i>viridula</i>
<i>Cocconeis pediculus</i>	<i>Gomphonema angustatum</i>
<i>Cocconeis placentula</i>	<i>Gomphonema angustatum</i> v. <i>producta</i>
<i>Cocconeis placentula</i> v. <i>euglypta</i>	<i>Gomphonema constrictum</i>
<i>Cocconeis placentula</i> v. <i>lineata</i>	<i>Gomphonema gracile</i>
<i>Coscinodiscus subsalsa</i>	<i>Gomphonema lanceolata</i>
<i>Cyclotella comta</i>	<i>Gomphonema olivaceum</i>
<i>Cyclotella kutzingiana</i>	<i>Gomphonema olivaceum</i> v. <i>calcareum</i>
<i>Cyclotella meneghiniana</i>	<i>Gomphonema parvulum</i>
<i>Cyclotella meneghiniana</i> v. <i>plana</i>	<i>Gomphonema subclavatum</i>
<i>Cyclotella michiganiana</i>	<i>Gomphonema turgestinum</i>
<i>Cyclotella ocellata</i>	<i>Gyrosigma</i> spp.
<i>Cyclotella operculata</i>	<i>Melosira granulata</i>
<i>Cyclotella stelligera</i>	<i>Melosira granulata</i> v. <i>angustissima</i>
<i>Cymatopleura solea</i>	<i>Melosira islandica</i>

Table 9 con't. Diatom psammon, November 1972.

<i>Melosira italica</i>	<i>Navicula terminata</i>
<i>Navicula acceptata</i>	<i>Navicula tripunctata</i>
<i>Navicula accommoda</i>	<i>Navicula tripunctata v. schizonemoides</i>
<i>Navicula anglica v. signata</i>	<i>Navicula tuscula</i>
<i>Navicula anglica v. subsalsa</i>	<i>Navicula tuscula v. minuta</i>
<i>Navicula bacillum</i>	<i>Navicula tuscula fo. minor</i>
<i>Navicula capitata</i>	<i>Navicula tuscula fo. obtuse</i>
<i>Navicula capitata v. hungarica</i>	<i>Navicula viridula</i>
<i>Navicula capitata v. luneburgensis</i>	<i>Navicula viridula v. avenacea</i>
<i>Navicula capsa</i>	<i>Navicula viridula v. linearis</i>
<i>Navicula clementis</i>	<i>Navicula wolterecki</i>
<i>Navicula clementis v. quadristigmata</i>	<i>Navicula spp. (our #71)</i>
<i>Navicula costulata</i>	<i>Navicula spp. (our #78)</i>
<i>Navicula cryptocephala</i>	<i>Navicula spp.</i>
<i>Navicula cryptocephala v. veneta</i>	<i>Neidium dubium</i>
<i>Navicula decussis</i>	<i>Neidium iridis v. vernalis</i>
<i>Navicula elginensis</i>	<i>Nitzschia acicularis</i>
<i>Navicula exigua v. capitata</i>	<i>Nitzschia acuta</i>
<i>Navicula exiguaformis</i>	<i>Nitzschia amphibia</i>
<i>Navicula gastrum</i>	<i>Nitzschia apiculata</i>
<i>Navicula gastrum v. signata</i>	<i>Nitzschia bacata</i>
<i>Navicula gastrum v. subsalsa</i>	<i>Nitzschia capitellata</i>
<i>Navicula gottlandica</i>	<i>Nitzschia confinis</i>
<i>Navicula gregaria</i>	<i>Nitzschia dissipata</i>
<i>Navicula heufleri</i>	<i>Nitzschia epithemioides</i>
<i>Navicula integra</i>	<i>Nitzschia fonticola</i>
<i>Navicula jaernefeltii</i>	<i>Nitzschia frustulum</i>
<i>Navicula lacustris</i>	<i>Nitzschia frustulum v. subsalina</i>
<i>Navicula lanceolata</i>	<i>Nitzschia hungarica</i>
<i>Navicula latens</i>	<i>Nitzschia insecta</i>
<i>Navicula menisculus</i>	<i>Nitzschia kützingiana</i>
<i>Navicula menisculus v. obtusa</i>	<i>Nitzschia luzonensis</i>
<i>Navicula menisculus v. upsaliensis</i>	<i>Nitzschia macilenta</i>
<i>Navicula micropupula</i>	<i>Nitzschia microcephala</i>
<i>Navicula minima</i>	<i>Nitzschia palea</i>
<i>Navicula nyassensis</i>	<i>Nitzschia paleacea</i>
<i>Navicula nyassensis fo. minor</i>	<i>Nitzschia recta</i>
<i>Navicula paludosa</i>	<i>Nitzschia spiculoides</i>
<i>Navicula platycephala</i>	<i>Nitzschia striolata</i>
<i>Navicula platystoma v. pantoscekii</i>	<i>Nitzschia thermalis fo. minor</i>
<i>Navicula protracta</i>	<i>Nitzschia tryblionella</i>
<i>Navicula pseudoscutiformis</i>	<i>Nitzschia spp. (our #1)</i>
<i>Navicula pseudoventralis</i>	<i>Nitzschia spp. (our #2)</i>
<i>Navicula pupula</i>	<i>Nitzschia spp.</i>
<i>Navicula pupula v. rectangularis</i>	<i>Oestrupia zachariasii</i>
<i>Navicula radiosa v. tenella</i>	<i>Oestrupia zachariasii v. undulata</i>
<i>Navicula scutelloides</i>	<i>Opephora martyi</i>
<i>Navicula seminuloides</i>	<i>Opephora spp.</i>
<i>Navicula seminulum</i>	<i>Pinnularia borealis</i>
<i>Navicula stroesei</i>	<i>Pinnularia spp.</i>
<i>Navicula submuralis</i>	<i>Rhizosolenia gracilis</i>
<i>Navicula tantula</i>	<i>Rhoicosphenia curvata</i>

Table 9 con't. Diatom psammon, November 1972.

*Rhopalodia gibba*  
*Stauroneis acutiuscula*  
*Stauroneis smithii*  
*Stauroneis* spp. (aff. *S. nana*)  
*Stauroneis* spp.  
*Stephanodiscus alpinus*  
*Stephanodiscus astraе*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Stephanodiscus transilvanicus*  
*Surirella angusta*  
*Surirella ovata*  
*Surirella* spp. (our #1)

*Surirella* (our #2)  
*Synedra delicatissima*  
*Synedra delicatissima* v. *angustissima*  
*Synedra demerarae*  
*Synedra fasciculata*  
*Synedra filiformis*  
*Synedra incisa*  
*Synedra minuscula*  
*Synedra parasitica*  
*Synedra tenera*  
*Synedra ulna*  
*Synedra ulna* v. *danica*  
*Synedra ulna* v. *oxyrhynchus*  
*Synedra ulna* v. *subaequalis*  
*Tabellaria fenestrata*  
*Tropidoneis lepidoptera* v. *proboscidea*

Sample NAWL, Slide #1

*Achnanthes affinis*  
*Achnanthes clevei*  
*Achnanthes clevei* v. *rostrata*  
*Achnanthes exigua* v. *constricta*  
*Achnanthes haukiana* v. *rostrata*  
*Achnanthes hungarica*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes lanceolata* v. *elliptica*  
*Achnanthes linearis*  
*Achnanthes minutissima*  
*Amphora calumetica*  
*Amphora hemicycla*  
*Amphora ovalis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Amphora subcostulata*  
*Asterionella formosa*  
*Caloneis bacillaris* v. *thermalis*  
*Caloneis bacillum*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cocconeis pediculus*  
*Cocconeis placentula*  
*Coscinodiscus subsalsa*  
*Cyclotella comta*  
*Cyclotella kützingiana*  
*Cyclotella meneghiniana*  
*Cyclotella meneghiniana* v. *plana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*

*Cyclotella operculata*  
*Cyclotella stelligera*  
*Cymatopleura solea*  
*Cymbella cistula*  
*Cymbella obtusiuscula*  
*Cymbella sinuata*  
*Cymbella subventricosa*  
*Cymbella turgida*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*  
*Diatoma vulgare* v. *breve*  
*Diploneis oculata*  
*Fragilaria brevistriata*  
*Fragilaria capucina*  
*Fragilaria construens*  
*Fragilaria construens* v. *binodis*  
*Fragilaria construens* v. *capitata*  
*Fragilaria construens* v. *venter*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria leptostauron* v. *dubia*  
*Fragilaria pantoscekii* v. *binodis*  
*Fragilaria pinnata* v. *lancettula*  
*Fragilaria pinnata* v. *minuta*  
*Frustulia rhomboides* v. *viridula*  
*Gomphonema constrictum*  
*Gomphonema gracile*  
*Gomphonema lanceolata*  
*Gomphonema olivaceum*  
*Gomphonema olivaceum* v. *calcareum*  
*Gomphonema subclavatum*

Table 9 con't. Diatom psammon, November 1972.

<i>Gyrosigma</i> spp.	<i>Nitzschia</i> <i>bacata</i>
<i>Melosira</i> <i>granulata</i>	<i>Nitzschia</i> <i>confinis</i>
<i>Melosira</i> <i>granulata</i> v. <i>angustissima</i>	<i>Nitzschia</i> <i>fonticola</i>
<i>Melosira</i> <i>islandica</i>	<i>Nitzschia</i> <i>hungarica</i>
<i>Melosira</i> <i>italica</i>	<i>Nitzschia</i> <i>insecta</i>
<i>Navicula</i> <i>capitata</i> v. <i>luneburgensis</i>	<i>Nitzschia</i> <i>kütziana</i>
<i>Navicula</i> <i>costulata</i>	<i>Nitzschia</i> <i>macilenta</i>
<i>Navicula</i> <i>cryptocephala</i>	<i>Nitzschia</i> <i>palea</i>
<i>Navicula</i> <i>decussis</i>	<i>Nitzschia</i> <i>recta</i>
<i>Navicula</i> <i>elginensis</i>	<i>Nitzschia</i> <i>spiculoides</i>
<i>Navicula</i> <i>exigua</i> v. <i>capitata</i>	<i>Nitzschia</i> <i>tryblionella</i>
<i>Navicula</i> <i>exiguaformis</i>	<i>Nitzschia</i> spp. (our #1)
<i>Navicula</i> <i>gastrum</i>	<i>Nitzschia</i> spp. (our #2)
<i>Navicula</i> <i>gastrum</i> v. <i>signata</i>	<i>Oestrupia</i> <i>zacharaisi</i>
<i>Navicula</i> <i>heufleri</i>	<i>Pinnularia</i> spp.
<i>Navicula</i> <i>integra</i>	<i>Rhizosolenia</i> <i>gracilis</i>
<i>Navicula</i> <i>menisculus</i> v. <i>upsaliensis</i>	<i>Rhoicosphenia</i> <i>curvata</i>
<i>Navicula</i> <i>micropupula</i>	<i>Rhopalodia</i> <i>gibba</i>
<i>Navicula</i> <i>latens</i>	<i>Stauroneis</i> <i>smithii</i>
<i>Navicula</i> <i>platystoma</i> v. <i>pantoscekii</i>	<i>Stephanodiscus</i> <i>alpinus</i>
<i>Navicula</i> <i>protracta</i>	<i>Stephanodiscus</i> <i>astraea</i>
<i>Navicula</i> <i>pseudoventralis</i>	<i>Stephanodiscus</i> <i>binderaanus</i>
<i>Navicula</i> <i>pupula</i>	<i>Stephanodiscus</i> <i>hantzschii</i>
<i>Navicula</i> <i>scutelloides</i>	<i>Stephanodiscus</i> <i>minutus</i>
<i>Navicula</i> <i>seminuloides</i>	<i>Stephanodiscus</i> <i>subtilis</i>
<i>Navicula</i> <i>stroesei</i>	<i>Stephanodiscus</i> <i>tenuis</i>
<i>Navicula</i> <i>submuralis</i>	<i>Stephanodiscus</i> <i>transilvanicus</i>
<i>Navicula</i> <i>terminata</i>	<i>Surirella</i> <i>angusta</i>
<i>Navicula</i> <i>tripunctata</i>	<i>Surirella</i> <i>ovata</i>
<i>Navicula</i> <i>tripunctata</i> v. <i>schizonemoides</i>	<i>Surirella</i> sp. 1
<i>Navicula</i> <i>tuscula</i>	<i>Surirella</i> sp. 2
<i>Navicula</i> <i>viridula</i>	<i>Synedra</i> <i>delicatissima</i>
<i>Navicula</i> <i>viridula</i> v. <i>avenacea</i>	<i>Synedra</i> <i>demerarae</i>
<i>Navicula</i> <i>viridula</i> v. <i>linearis</i>	<i>Synedra</i> <i>fasciculata</i>
<i>Navicula</i> <i>wolterecki</i>	<i>Synedra</i> <i>filiformis</i>
<i>Navicula</i> spp. (our #78)	<i>Synedra</i> <i>parasitica</i>
<i>Neidium</i> <i>dubium</i>	<i>Synedra</i> <i>ulna</i>
<i>Nitzschia</i> <i>acuta</i>	<i>Synedra</i> <i>ulna</i> v. <i>subaequalis</i>
<i>Nitzschia</i> <i>amphibia</i>	<i>Tabellaria</i> <i>fenestrata</i>
<i>Nitzschia</i> <i>apiculata</i>	<i>Tropidoneis</i> <i>lepidoptera</i> v. <i>proboscidea</i>

Sample DCAWL, Slide #1

<i>Achnanthes</i> <i>clevei</i>	<i>Achnanthes</i> <i>lanceolata</i> v. <i>robusta</i>
<i>Achnanthes</i> <i>clevei</i> v. <i>rostrata</i>	<i>Achnanthes</i> spp.
<i>Achnanthes</i> <i>exigua</i>	<i>Amphora</i> <i>ovalis</i>
<i>Achnanthes</i> <i>lanceolata</i>	<i>Amphora</i> <i>ovalis</i> v. <i>gracilis</i>
<i>Achnanthes</i> <i>lanceolata</i> v. <i>dubia</i>	<i>Amphora</i> <i>ovalis</i> v. <i>libyca</i>
<i>Achnanthes</i> <i>lanceolata</i> v. <i>elliptica</i>	<i>Amphora</i> <i>ovalis</i> v. <i>pediculus</i>

Table 9 con't. Diatom psammon, November 1972.

*Amphora siberica*  
*Asterionella formosa*  
*Cocconeis diminuta*  
*Cocconeis pediculus*  
*Cyclotella cryptica*  
*Cyclotella kützingeriana*  
*Cyclotella michiganiana*  
*Cyclotella stelligera*  
*Dinobryon* spp.  
*Fragilaria capucina*  
*Fragilaria intermedia*  
*Gomphonema subclavatum*  
*Melosira granulata*  
*Navicula capitata* v. *luneburgensis*  
*Navicula costulata*  
*Navicula decussis*  
*Navicula gastrum* v. *signata*  
*Navicula latens*  
*Navicula menisculus*  
*Navicula menisculus* v. *upsaliensis*  
*Navicula micropupula*  
*Navicula nyassensis* fo. *minor*

*Navicula pupula*  
*Navicula scutelloides*  
*Navicula seminuloides*  
*Navicula seminulum*  
*Navicula submuralis*  
*Navicula viridula*  
*Navicula* spp. (our #78)  
*Neidium dubium*  
*Nitzschia dissipata*  
*Nitzschia fonticola*  
*Nitzschia thermalis* fo. *minor*  
*Nitzschia* spp. (our #1)  
*Opephora* spp.  
*Pinnularia borealis*  
*Stephanodiscus alpinus*  
*Stephanodiscus astraes*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus tenuis*  
*Synedra delicatissima*  
*Synedra tenera*  
*Synedra ulna*  
*Tabellaria fenestrata*

Sample SAWL, Slide #1

*Achnanthes affinis*  
*Achnanthes clevei*  
*Achnanthes clevei* v. *rostrata*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata* v. *dubia*  
*Achnanthes lanceolata* v. *elliptica*  
*Achnanthes linearis*  
*Achnanthes peragalli*  
*Achnanthes ploenensis*  
*Amphora fonticola*  
*Amphora hemicycla*  
*Amphora ovalis*  
*Amphora ovalis* v. *gracilis*  
*Amphora ovalis* v. *libyca*  
*Amphora ovalis* v. *pediculus*  
*Amphora rotunda*  
*Amphora sibirica*  
*Amphora subcostulata*  
*Asterionella formosa*  
*Caloneis ventricosa* v. *minuta*  
*Cocconeis diminuta*  
*Cocconeis pediculus*  
*Cocconeis placentula* v. *euglypta*

*Cyclotella comta*  
*Cyclotella kützingeriana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella stelligera*  
*Cymatopleura solea* v. *apiculata*  
*Cymbella prostrata*  
*Cymbella sinuata*  
*Diploneis oculata*  
*Fragilaria crotonensis*  
*Fragilaria intermedia*  
*Fragilaria pinnata*  
*Fragilaria pinnata* v. *lancettula*  
*Fragilaria pinnata* v. *minuta*  
*Fragilaria vaucheriae*  
*Fragilaria vaucheriae* v. *lanceola*  
*Gomphonema angustatum*  
*Gomphonema turgestinum*  
*Melosira granulata*  
*Melosira granulata* v. *angustissim*  
*Melosira islandica*  
*Melosira italica*  
*Navicula acceptata*



Table 9 con't. Diatom psammon, November 1972.

<i>Navicula anglica</i> v. <i>signata</i>	<i>Navicula</i> spp. (our #71)
<i>Navicula anglica</i> v. <i>subsalsa</i>	<i>Neidium iridis</i> v. <i>vernalis</i>
<i>Navicula bacillum</i>	<i>Nitzschia acicularis</i>
<i>Navicula capitata</i>	<i>Nitzschia capitellata</i>
<i>Navicula capitata</i> v. <i>hungarica</i>	<i>Nitzschia confinis</i>
<i>Navicula capitata</i> v. <i>luneburgensis</i>	<i>Nitzschia dissipata</i>
<i>Navicula capsa</i>	<i>Nitzschia fonticola</i>
<i>Navicula clementis</i>	<i>Nitzschia frustulum</i>
<i>Navicula costulata</i>	<i>Nitzschia insecta</i>
<i>Navicula cryptocephala</i>	<i>Nitzschia luzonensis</i>
<i>Navicula cryptocephala</i> v. <i>veneta</i>	<i>Nitzschia microcephala</i>
<i>Navicula decussis</i>	<i>Nitzschia palea</i>
<i>Navicula exiguaformis</i>	<i>Nitzschia paleacea</i>
<i>Navicula gregaria</i>	<i>Nitzschia recta</i>
<i>Navicula heufleri</i>	<i>Nitzschia</i> spp. (our #1)
<i>Navicula jaernefeltii</i>	<i>Nitzschia</i> spp. (our #2)
<i>Navicula latens</i>	<i>Rhizosolenia gracilis</i>
<i>Navicula menisculus</i> v. <i>upsaliensis</i>	<i>Stauroneis acutiuscula</i>
<i>Navicula micropupula</i>	<i>Stauroneis</i> spp. (aff. <i>S. nana</i> )
<i>Navicula minima</i>	<i>Stauroneis</i> spp.
<i>Navicula nyassensis</i> fo. <i>minor</i>	<i>Stephanodiscus alpinus</i>
<i>Navicula paludosa</i>	<i>Stephanodiscus astraea</i>
<i>Navicula pupula</i>	<i>Stephanodiscus hantzschii</i>
<i>Navicula protracta</i>	<i>Stephanodiscus minutus</i>
<i>Navicula pseudoscutiformis</i>	<i>Stephanodiscus subtilis</i>
<i>Navicula scutelloides</i>	<i>Stephanodiscus tenuis</i>
<i>Navicula seminuloides</i>	<i>Stephanodiscus transilvanicus</i>
<i>Navicula seminulum</i>	<i>Synedra delicatissima</i>
<i>Navicula stroesei</i>	<i>Synedra delicatissima</i> v. <i>angustissima</i>
<i>Navicula submuralis</i>	<i>Synedra demerarae</i>
<i>Navicula tantula</i>	<i>Synedra fasciculata</i>
<i>Navicula tuscula</i> fo. <i>minor</i>	<i>Synedra filiformis</i>
<i>Navicula viridula</i>	<i>Synedra incisa</i>
<i>Navicula viridula</i> v. <i>linearis</i>	<i>Synedra minuscula</i>
<i>Navicula</i> spp.	<i>Synedra ulna</i>
<i>Navicula</i> spp. (our #78)	<i>Tabellaria fenestrata</i>

Sample NWL, Slide #1

<i>Achnanthes clevei</i>	<i>Amphora ovalis</i> v. <i>pediculus</i>
<i>Achnanthes lanceolata</i>	<i>Amphora sibirica</i>
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	<i>Asterionella formosa</i>
<i>Achnanthes lanceolata</i> v. <i>elliptica</i>	<i>Caloneis bacillum</i>
<i>Achnanthes lanceolata</i> v. <i>robusta</i>	<i>Caloneis ventricosa</i> v. <i>minuta</i>
<i>Achnanthes minutissima</i>	<i>Cocconeis diminuta</i>
<i>Amphipleura pellucida</i>	<i>Cocconeis placentula</i>
<i>Amphora calumetica</i>	<i>Cocconeis placentula</i> v. <i>lineata</i>
<i>Amphora ovalis</i>	<i>Cyclotella comta</i>
<i>Amphora ovalis</i> v. <i>libyca</i>	<i>Cyclotella meneghiniana</i>

Table 9 con't. Diatom psammon, November 1972.

*Cyclotella meneghiniana* v. *plana*  
*Cyclotella michiganiana*  
*Cyclotella ocellata*  
*Cyclotella stelligera*  
*Cymatopleura solea*  
*Cymbella affinis*  
*Diatoma tenue* v. *elongatum*  
*Diatoma vulgare*  
*Fragilaria capucina*  
*Fragilaria construens*  
*Fragilaria construens* v. *binodis*  
*Fragilaria construens* v. *pumila*  
*Fragilaria construens* v. *venter*  
*Fragilaria crotonensis*  
*Fragilaria delicatissima*  
*Fragilaria pinnata*  
*Fragilaria pinnata* v. *minuta*  
*Fragilaria vaucheriae*  
*Gomphonema angustatum*  
*Gomphonema olivaceum* v. *calcareum*  
*Gomphonema parvulum*  
*Melosira granulata*  
*Melosira granulata* v. *angustissima*  
*Melosira islandica*  
*Melosira italica*  
*Navicula anglica* v. *subsalsa*  
*Navicula capitata* v. *luneburgensis*  
*Navicula costulata*  
*Navicula cryptocephala*  
*Navicula cryptocephala* v. *veneta*  
*Navicula decussis*  
*Navicula exiguaformis*  
*Navicula lanceolata*  
*Navicula latens*  
*Navicula minima*  
*Navicula menisculus* v. *upsaliensis*  
*Navicula micropupula*  
*Navicula nyassensis* fo. *minor*  
*Navicula platycephala*  
*Navicula platystoma* v. *pantosceki*  
*Navicula pupula*  
*Navicula pupula* v. *rectangularis*  
*Navicula radiosa* v. *tenella*  
*Navicula scutelloides*

*Navicula seminuloides*  
*Navicula seminulum*  
*Navicula stroesei*  
*Navicula submuralis*  
*Navicula tripunctata*  
*Navicula tuscula* fo. *obtusca*  
*Navicula viridula*  
*Navicula viridula* v. *linearis*  
*Navicula* spp. (our #78)  
*Neidium dubium*  
*Nitzschia acuta*  
*Nitzschia amphibia*  
*Nitzschia bacata*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia epithemioides*  
*Nitzschia fonticola*  
*Nitzschia insecta*  
*Nitzschia kützingeriana*  
*Nitzschia palea*  
*Nitzschia recta*  
*Nitzschia spiculoides*  
*Nitzschia* spp. (our #1)  
*Nitzschia* spp. (our #2)  
*Nitzschia* spp.  
*Oestrupia zachariasii*  
*Oestrupia zachariasii* v. *undulata*  
*Opephora martyi*  
*Rhoicosphenia curvata*  
*Stauroneis acutiuscula*  
*Stephanodiscus alpinus*  
*Stephanodiscus astraia*  
*Stephanodiscus binderanus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus subtilis*  
*Stephanodiscus tenuis*  
*Surirella angusta*  
*Surirella* spp. 1  
*Surirella* spp. 2  
*Synedra demerarae*  
*Synedra filiformis*  
*Synedra ulna*  
*Tabellaria fenestrata*

Table 9 con't. Diatom psammon, November 1972.

<u>Very common species</u>	<u>Common species</u>	<u>Rare species</u>
<i>Cocconeis diminuta</i>	<i>Amphora ovalis</i>	<i>Amphipleura pellucida</i>
<i>Melosira islandica</i>	<i>Achnanthes lanceolata</i>	<i>Cocconeis placentula</i>
<i>Navicula decussis</i>	<i>Navicula latens</i>	<i>v. lineata</i>
<i>Navicula exiguaformis</i>	<i>Navicula meniscus</i>	<i>Cyclotella stelligera</i>
<i>Tabellaria fenestrata</i>	<i>v. upsaliensis</i>	<i>Cymatopleura solea</i>
	<i>Navicula nyassensis</i>	<i>Diatoma tenue v.</i>
	<i>fo. minor</i>	<i>elongatum</i>
	<i>Navicula scutelloides</i>	<i>Navicula platycephala</i>
	<i>Navicula viridula</i>	<i>Navicula pupula v.</i>
	<i>v. linearis</i>	<i>rectangularis</i>
	<i>Synedra delicatissima</i>	<i>Nitzschia insecta</i>
	<i>Synedra ulna</i>	<i>Oestrupia zachariasii</i>
		<i>Oestrupia zachariasii</i>
		<i>v. undulata</i>
		<i>Opephora martyi</i>
		<i>Stauroneis acutiuscula</i>
		<i>Stephanodiscus binderanus</i>

More *Melosira islandica* was present than *Melosira granulata*. Usually the opposite is true.

Sample DCWL, Slide #1

<i>Achnanthes clevei</i>	<i>Navicula decussis</i>
<i>Achnanthes hungarica</i>	<i>Navicula exiguaformis</i>
<i>Achnanthes lanceolata v. dubia</i>	<i>Navicula latens</i>
<i>Achnanthes lanceolata v. elliptica</i>	<i>Navicula meniscus v. upsaliensis</i>
<i>Achnanthes lanceolata</i>	<i>Navicula micropupula</i>
<i>Amphora ovalis</i>	<i>Navicula nyassensis fo. minor</i>
<i>Amphora ovalis v. libyca</i>	<i>Navicula pupula</i>
<i>Amphora ovalis v. pediculus</i>	<i>Navicula seminuloides</i>
<i>Caloneis ventricosa v. minuta</i>	<i>Navicula seminulum</i>
<i>Cocconeis diminuta</i>	<i>Navicula submuralis</i>
<i>Cyclotella comta</i>	<i>Navicula viridula</i>
<i>Diatoma tenue v. elongatum</i>	<i>Navicula spp. (our #78)</i>
<i>Dinobryon sociale</i>	<i>Nitzschia palea</i>
<i>Fragilaria crotonensis</i>	<i>Nitzschia recta</i>
<i>Fragilaria intermedia</i>	<i>Stephanodiscus alpinus</i>
<i>Gomphonema angustatum</i>	<i>Stephanodiscus astraia</i>
<i>Melosira granulata</i>	<i>Synedra delicatissima</i>
<i>Melosira granulata v. angustissima</i>	<i>Synedra delicatissima v. angustissima</i>
<i>Melosira islandica</i>	<i>Synedra filiformis</i>
<i>Navicula clementis v. quadrastigmata</i>	<i>Tabellaria fenestrata</i>

Table 9 con't. Diatom psammon, November 1972.

Sample SWL, Slide #1

<i>Achnanthes clevei</i>	<i>Navicula cryptocephala</i>
<i>Achnanthes kryophila</i>	<i>Navicula decussis</i>
<i>Achnanthes lanceolata</i>	<i>Navicula gastrum</i>
<i>Achnanthes lanceolata v. dubia</i>	<i>Navicula gregaria</i>
<i>Achnanthes lanceolata v. elliptica</i>	<i>Navicula lacustris</i>
<i>Amphora calumetica</i>	<i>Navicula latens</i>
<i>Amphora ovalis</i>	<i>Navicula menisculus v. upsaliensis</i>
<i>Amphora ovalis v. libyca</i>	<i>Navicula micropupula</i>
<i>Amphora ovalis v. pediculus</i>	<i>Navicula minima</i>
<i>Amphora rotunda</i>	<i>Navicula nyassensis</i>
<i>Asterionella formosa</i>	<i>Navicula pupula</i>
<i>Caloneis ventricosa v. minuta</i>	<i>Navicula scutelloides</i>
<i>Cocconeis diminuta</i>	<i>Navicula seminuloides</i>
<i>Cocconeis placentula v. euglypta</i>	<i>Navicula seminulum</i>
<i>Cocconeis placentula v. lineata</i>	<i>Navicula terminata</i>
<i>Cymbella microcephala</i>	<i>Navicula tripunctata</i>
<i>Cymbella subventricosa</i>	<i>Navicula viridula v. linearis</i>
<i>Cyclotella comta</i>	<i>Navicula spp. (our #78)</i>
<i>Cyclotella ocellata</i>	<i>Nitzschia acuta</i>
<i>Fragilaria capucina</i>	<i>Nitzschia amphibia</i>
<i>Fragilaria construens v. venter</i>	<i>Nitzschia bacata</i>
<i>Fragilaria crotonensis</i>	<i>Nitzschia dissipata</i>
<i>Gomphonema angustatum</i>	<i>Nitzschia fonticola</i>
<i>Gomphonema angustatum v. producta</i>	<i>Nitzschia palea</i>
<i>Gomphonema olivaceum</i>	<i>Nitzschia recta</i>
<i>Gomphonema parvulum</i>	<i>Stephanodiscus alpinus</i>
<i>Melosira granulata</i>	<i>Stephanodiscus hantzschii</i>
<i>Melosira italica</i>	<i>Stephanodiscus subtilis</i>
<i>Navicula accommoda</i>	<i>Synedra minuscula</i>
<i>Navicula anglica v. subsala</i>	<i>Synedra ulna</i>
<i>Navicula capitata</i>	<i>Tabellaria fenestrata</i>
<i>Navicula capitata v. hungarica</i>	

Sample SBWL, Slide #1

<i>Achnanthes clevei</i>	<i>Cocconeis placentula v. euglypta</i>
<i>Achnanthes lanceolata</i>	<i>Cyclotella comta</i>
<i>Achnanthes lanceolata v. dubia</i>	<i>Cyclotella kützingeriana</i>
<i>Achnanthes lanceolata v. elliptica</i>	<i>Fragilaria capucina</i>
<i>Amphora ovalis</i>	<i>Fragilaria crotonensis</i>
<i>Amphora ovalis v. libyca</i>	<i>Fragilaria intermedia</i>
<i>Amphora ovalis v. pediculus</i>	<i>Fragilaria pinnata v. lancettula</i>
<i>Amphora subcostulata</i>	<i>Fragilaria pinnata v. venter</i>
<i>Asterionella formosa</i>	<i>Gomphonema angustatum</i>
<i>Caloneis ventricosa v. minuta</i>	<i>Gomphonema parvulum</i>
<i>Cocconeis diminuta</i>	<i>Melosira granulata</i>
<i>Cocconeis pediculus</i>	<i>Melosira granulata v. angustissima</i>

Table 9 con't. Diatom psammon, November 1972.

*Melosira islandica*  
*Navicula capitata*  
*Navicula decussis*  
*Navicula exiguaformis*  
*Navicula gottlandica*  
*Navicula gregaria*  
*Navicula latens*  
*Navicula menisculus v. upsaliensis*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula nyassensis* fo. minor  
*Navicula paludosa*  
*Navicula pupula*  
*Navicula scutelloides*  
*Navicula seminuloides*  
*Navicula seminulum*  
*Navicula submuralis*  
*Navicula tuscula v. minuta*

*Navicula viridula v. linearis*  
*Neidium dubium*  
*Nitzschia acuta*  
*Nitzschia angusta v. acuta*  
*Nitzschia fonticola*  
*Nitzschia frustulum v. subsalina*  
*Nitzschia microcephala*  
*Nitzschia palea*  
*Nitzschia recta*  
*Nitzschia* spp. (our #1)  
*Stephanodiscus alpinus*  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus tenuis*  
*Synedra delicatissima*  
*Synedra delicatissima v. angustissima*  
*Synedra ulna*  
*Tabellaria fenestrata*

Sample DCBWL, Slide #1

*Achnanthes clevei*  
*Achnanthes lanceolata*  
*Achnanthes lanceolata v. dubia*  
*Achnanthes lanceolata v. elliptica*  
*Amphora calumetica*  
*Amphora lanceolata*  
*Amphora ovalis*  
*Amphora ovalis v. libyca*  
*Amphora ovalis v. pediculus*  
*Amphora sibirica*  
*Amphora subconstricta*  
*Asterionella formosa*  
*Caloneis bacillum*  
*Caloneis ventricosa v. minuta*  
*Cocconeis diminuta*  
*Cocconeis pediculus*  
*Cyclotella kützingiana*  
*Cyclotella michiganiana*  
*Cymbella sinuata*  
*Dinobryon* spp.  
*Diploneis parma*  
*Fragilaria brevistriata v. inflata*  
*Fragilaria capucina*  
*Fragilaria crotonensis*  
*Melosira granulata*  
*Melosira granulata v. angustissima*  
*Melosira islandica*  
*Navicula anglica v. signata*  
*Navicula clementis v. quadristigmata*

*Navicula decussis*  
*Navicula exiguaformis*  
*Navicula heufleri*  
*Navicula latens*  
*Navicula minisculus*  
*Navicula menisculus v. upsaliensis*  
*Navicula menisculus v. obtusa*  
*Navicula micropupula*  
*Navicula minima*  
*Navicula pupula*  
*Navicula scutelloides*  
*Navicula seminuloides*  
*Navicula seminulum*  
*Navicula stroesei*  
*Navicula submuralis*  
*Navicula viridula*  
*Nitzschia acuta*  
*Nitzschia confinis*  
*Nitzschia dissipata*  
*Nitzschia recta*  
*Nitzschia* spp. (our #2)  
*Stephanodiscus hantzschii*  
*Stephanodiscus minutus*  
*Stephanodiscus subtilis*  
*Stephanodiscus transilvanicus*  
*Synedra delicatissima v. angustissima*  
*Synedra ulna*  
*Synedra ulna v. oxyrhynchus*  
*Tabellaria fenestrata*

Table 9 con't. Diatom psammon, November 1972.

Sample NBWL, Slide #1

<i>Achnanthes affinis</i>	<i>Navicula exiguaformis</i>
<i>Achnanthes clevei</i>	<i>Navicula gastrum v. subsalsa</i>
<i>Achnanthes clevei v. rostrata</i>	<i>Navicula jaernefeltii</i>
<i>Achnanthes hungarica</i>	<i>Navicula latens</i>
<i>Achnanthes lanceolata</i>	<i>Navicula menisculus v. upsaliensis</i>
<i>Achnanthes lanceolata v. dubia</i>	<i>Navicula micropupula</i>
<i>Achnanthes lanceolata v. elliptica</i>	<i>Navicula nyassensis fo. minor</i>
<i>Achnanthes microcephala</i>	<i>Navicula pupula</i>
<i>Amphora ovalis</i>	<i>Navicula scutelloides</i>
<i>Amphora ovalis v. gracilis</i>	<i>Navicula seminuloides</i>
<i>Amphora ovalis v. libyca</i>	<i>Navicula seminulum</i>
<i>Amphora ovalis v. pediculus</i>	<i>Navicula submuralis</i>
<i>Amphora sibirica</i>	<i>Navicula viridula</i>
<i>Asterionella formosa</i>	<i>Navicula viridula v. linearis</i>
<i>Caloneis ventricosa v. minuta</i>	<i>Neidium dubium</i>
<i>Cocconeis diminuta</i>	<i>Nitzschia capitellata</i>
<i>Cyclotella comta</i>	<i>Nitzschia confinis</i>
<i>Cyclotella meneghiniana</i>	<i>Nitzschia dissipata</i>
<i>Cyclotella meneghiniana v. plana</i>	<i>Nitzschia fonticola</i>
<i>Cyclotella michiganiana</i>	<i>Nitzschia palea</i>
<i>Cyclotella ocellata</i>	<i>Nitzschia recta</i>
<i>Cyclotella stelligera</i>	<i>Nitzschia spiculoides</i>
<i>Cymatopleura solea</i>	<i>Nitzschia striolata (?)</i>
<i>Cymbella prostrata</i>	<i>Nitzschia spp. (our #1)</i>
<i>Diatoma tenue v. elongatum</i>	<i>Rhizosolenia gracilis</i>
<i>Fragilaria capucina</i>	<i>Stephanodiscus astraea</i>
<i>Fragilaria construens</i>	<i>Stephanodiscus binderanus</i>
<i>Fragilaria construens v. binodis</i>	<i>Stephanodiscus hantzschii</i>
<i>Fragilaria crotonensis</i>	<i>Stephanodiscus minutus</i>
<i>Fragilaria intermedia</i>	<i>Stephanodiscus subtilis</i>
<i>Fragilaria pinnata</i>	<i>Stephanodiscus tenuis</i>
<i>Fragilaria vaucheriae</i>	<i>Synedra delicatissima</i>
<i>Melosira granulata</i>	<i>Synedra delicatissima v. angustissima</i>
<i>Melosira islandica</i>	<i>Synedra demerarae</i>
<i>Melosira italica</i>	<i>Synedra filiformis</i>
<i>Navicula costulata</i>	<i>Synedra ulna v. danica</i>
<i>Navicula decussis</i>	<i>Tabellaria fenestrata</i>

Table 10. Master species list, Diatom psammon, 1972.

Key: 1 = above waterline  
 2 = waterline  
 3 = below waterline

	May	Aug	Sept	Nov
<i>Achnanthes affinis</i>	2		3	1 3
<i>Achnanthes austriaca</i> v. <i>helvetica</i> ?		2		
<i>Achnanthes clevei</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Achnanthes clevei</i> v. <i>rostrata</i>	1 2	1 2 3	1 2 3	1 3
<i>Achnanthes conspicua</i>	2 3			
<i>Achnanthes detha</i>	3			
<i>Achnanthes dispar</i> aff.?		2		
<i>Achnanthes exigua</i>				1
<i>Achnanthes exigua</i> v. <i>constricta</i>				1
<i>Achnanthes exigua</i> v. <i>heterovalva</i>	2	1	1	
<i>Achnanthes flexella</i>		2		
<i>Achnanthes haukiana</i>				2
<i>Achnanthes haukiana</i> v. <i>rostrata</i>				1
<i>Achnanthes hungarica</i>	1		1 3	1 2 3
<i>Achnanthes kryophila</i>				2
<i>Achnanthes lanceolata</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Achnanthes lanceolata</i> v. <i>dubia</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Achnanthes lanceolata</i> v. <i>elliptica</i>	2 3	2	3	1 2 3
<i>Achnanthes lanceolata</i> v. <i>omissa</i>		1		
<i>Achnanthes lanceolata</i> v. <i>robusta</i>			1 2 3	1 2
<i>Achnanthes lanceolata</i> v. ?	2			
<i>Achnanthes lauenburgiana</i>	2			
<i>Achnanthes linearis</i>	1	1	3	1
<i>Achnanthes microcephala</i>				3
<i>Achnanthes minutissima</i>	1	1	2	1 2
<i>Achnanthes peragalli</i>				1
<i>Achnanthes pinnata</i>	2 3	1	1 2 3	
<i>Achnanthes ploenensis</i>				1
<i>Achnanthes</i> spp. (our #1)		1		
<i>Achnanthes</i> spp. (our #25)		2		
<i>Achnanthes</i> spp.	1			1
<i>Amphipleura pellucida</i>	1 3		1	2
<i>Amphiprora ornata</i>	1 2	1 2	1	
<i>Amphora calumetica</i>	1	1	1	1 2 3
<i>Amphora cruciferoides</i>			1	
<i>Amphora fonticola</i>				1
<i>Amphora hemicycla</i>				1
<i>Amphora montana</i>	1	1		
<i>Amphora neglecta</i>	3			
<i>Amphora normani</i>			1	

Table 10 con't. Master species list, Diatom psammon, 1972.

	May	Aug	Sept	Nov
<i>Amphora ovalis</i>	1 2	1 2 3	1 2 3	1 2 3
<i>Amphora ovalis v. gracilis</i>	3		2	1 3
<i>Amphora ovalis v. libyca</i>	1 2	1 2 3	1 2 3	1 2 3
<i>Amphora ovalis v. pediculus</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Amphora rotunda</i>				1 2
<i>Amphora sibirica</i>	1 2	3		1 2 3
<i>Amphora subconstricta</i>				3
<i>Amphora subcostulata</i>	3	1 2	1 2 3	1 3
<i>Amphora veneta</i>		3		
<i>Amphora veneta v. angularis</i>	1		1	
<i>Amphora spp.</i>	3		2	
<i>Asterionella formosa</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Caloneis amphisbaena</i>	1			
<i>Caloneis bacillaris v. thermalis</i>				1
<i>Caloneis bacillum</i>		1	2	1 2 3
<i>Caloneis bacillum v. lancettula</i>		1		
<i>Caloneis lewisei</i>		1		
<i>Caloneis Schumanniana</i>			3	
<i>Caloneis ventricosa</i>	1 3			
<i>Caloneis ventricosa v. minura</i>	1 2	1 2	1 2 3	1 2 3
<i>Caloneis ventricosa v. truncatula</i>			1	
<i>Cocconeis diminuta</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Cocconeis disculus</i>	1			
<i>Cocconeis pediculus</i>	1	1	1	1 3
<i>Cocconeis placentula</i>	1 2	1 2	1 2	1 2
<i>Cocconeis placentula v. euglypta</i>	3			1 2 3
<i>Cocconeis placentula v. lineata</i>				2
<i>Coscinodiscus subsalsa</i>			1	1
<i>Cyclotella comta</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Cyclotella cryptica</i>		1	1 2	1
<i>Cyclotella kützingiana</i>			1 3	1 3
<i>Cyclotella kützingiana v. planetophora</i>	2 3			
<i>Cyclotella meneghiniana</i>	1 2 3	1 2 3	1 2	1 2 3
<i>Cyclotella meneghiniana v. plana</i>	2	1 2	1	1 2 3
<i>Cyclotella michiganiana</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Cyclotella ocellata</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Cyclotella operculata</i>				1
<i>Cyclotella pseudostelligera</i>	1	1 2 3	1	
<i>Cyclotella stelligera</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Cyclotella temperei</i>		1	1	



Table 10 con't. Master species list, Diatom psammon, 1972.

	May	Aug	Sept	Nov
<i>Cymatopleura solea</i>	1 2	1	1 2 3	1 2 3
<i>Cymatopleura solea</i> v. <i>apiculata</i>	2			1
<i>Cymbella affinis</i>	1			2
<i>Cymbella cistula</i>			2	1
<i>Cymbella latens</i>	1			
<i>Cymbella microcephala</i>	1			2
<i>Cymbella naviculiformis</i>	1			
<i>Cymbella obtusiuscula</i>				1
<i>Cymbella prostrata</i>	1 2	1	1	1 3
<i>Cymbella sinuata</i>				1 3
<i>Cymbella sinuata</i> fo. <i>minor</i>		1		
<i>Cymbella subventricosa</i>	1	1		1 2
<i>Cymbella turgida</i>				1
<i>Cymbella turgida</i> v. <i>pseudogracilis</i>	1			
<i>Cymbella</i> spp. (our #6)	2			
<i>Diatoma anceps</i>	1			
<i>Diatoma hiemale</i> v. <i>mesodon</i>	1			
<i>Diatoma tenue</i>	1 2	1	1	
<i>Diatoma tenue</i> v. <i>elongatum</i>	1 2 3	1 2	1	1 2 3
<i>Diatoma vulgare</i>	1 2 3	1 2 3	1	1 2
<i>Diatoma vulgare</i> v. <i>breve</i>				1
<i>Dinobryon divergens</i>	1 2		1	
<i>Dinobryon sociale</i>				1
<i>Dinobryon</i> spp.				1 3
<i>Diploneis oculata</i>	2	1	1	1
<i>Diploneis parma</i>	1	1 2 3	1 3	3
<i>Diploneis</i> spp.	1		1 3	
<i>Eunotia</i> spp. ?	2			
<i>Eunotia praerupta</i> v. <i>inflata</i>	1			
<i>Fragilaria brevistriata</i>		1	1	1
<i>Fragilaria brevistriata</i> v. <i>inflata</i>		2		3
<i>Fragilaria capucina</i>	1 2 3	1 2	1 2	1 2 3
<i>Fragilaria capucina</i> v. <i>mesolepta</i>	1	1 3		
<i>Fragilaria construens</i>	1 2 3	1 2	1 3	1 2 3
<i>Fragilaria construens</i> v. <i>binodis</i>	1	1 2 3	1	1 2 3
<i>Fragilaria construens</i> v. <i>capitata</i>	2			1
<i>Fragilaria construens</i> v. <i>minuta</i>	1	1 2	1	
<i>Fragilaria construens</i> v. <i>pumila</i>				2
<i>Fragilaria construens</i> v. <i>subsalina</i>	1		1	
<i>Fragilaria construens</i> v. <i>venter</i>				1 2

Table 10 con't. Master species list, Diatom psammon, 1972.

	May	Aug	Sept	Nov
<i>Fragilaria crotonensis</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Fragilaria delicatissima</i>				2
<i>Fragilaria intermedia</i>	1 2	1 2 3	1	1 2 3
<i>Fragilaria intermedia</i> v. <i>fallax</i>	1 3	3		
<i>Fragilaria leptostauron</i>			1	
<i>Fragilaria leptostauron</i> v. <i>dubia</i>				1
<i>Fragilaria pantoscekii</i> v. <i>binodis</i>				1
<i>Fragilaria pinnata</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Fragilaria pinnata</i> v. <i>intercedens</i>	3			
<i>Fragilaria pinnata</i> v. <i>lancettula</i>	1 2	1	1	1 3
<i>Fragilaria pinnata</i> v. <i>minuta</i>				1 2
<i>Fragilaria vaucheriae</i>	1	1 2	1 2 3	1 2 3
<i>Fragilaria vaucheriae</i> v. <i>lanceolata</i>				1
<i>Fragilaria vaucheriae</i> v. <i>truncata</i>		1		
<i>Frustulia rhomboides</i> v. <i>viridula</i>				1
<i>Frustulia vulgaris</i>	1			
<i>Gomphonema angustatum</i>	1 3	1 2	1 2 3	1 2 3
<i>Gomphonema angustatum</i> v. <i>producta</i>				2
<i>Gomphonema constrictum</i>	1			1
<i>Gomphonema gracile</i>				1
<i>Gomphonema intricatum</i>		2		
<i>Gomphonema intricatum</i> v. <i>pumila</i>	2			
<i>Gomphonema lanceolatum</i>	3			1
<i>Gomphonema lanceolatum</i> v. <i>insignis</i>	1			
<i>Gomphonema olivaceodes</i>	1			
<i>Gomphonema olivaceum</i>	1 2 3	1 2 3	1 2 3	1 2
<i>Gomphonema olivaceum</i> v. <i>calcareum</i>				1 2
<i>Gomphonema parvulum</i>				2 3
<i>Gomphonema sphaerophorum</i>	1			
<i>Gomphonema subclavatum</i>			1	1
<i>Gomphonema tergestinum</i>		1		1
<i>Gomphonema</i> spp.	1 2		3	
<i>Gyrosigma</i> spp.	1			1
<i>Hantzschia amphioxys</i>	1	1		
<i>Mastogloia smithii</i> v. <i>lacustris</i>	1			
<i>Melosira distans</i>	1			
<i>Melosira granulata</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Melosira granulata</i> v. <i>angustissima</i>			1	1 2 3
<i>Melosira islandica</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Melosira italica</i>	1 2 3	1 2 3	1 2 3	1 2 3

Table 10 con't. Master species list, Diatom psammon, 1972.

	May	Aug	Sept	Nov
<i>Meridion circulare</i>	1			
<i>Meridion circulare</i> v. <i>constrictum</i>	1	1	2	
<i>Navicula acceptata</i>				1
<i>Navicula accommoda</i>	1			2
<i>Navicula anglica</i> v. <i>signata</i>		1	1 3	1 3
<i>Navicula anglica</i> v. <i>subsalina</i>			3	
<i>Navicula anglica</i> v. <i>subsalsa</i>	1	1 2	3	1 2
<i>Navicula aurora</i>	3	1 2	1 3	
<i>Navicula bacillum</i>	1 3	1	1	1
<i>Navicula capitata</i>	1 2 3	1 2	1	1 2 3
<i>Navicula capitata</i> v. <i>hungarica</i>	1 2			1 2
<i>Navicula capitata</i> v. <i>luneburgensis</i>	2	1 2	1 2 3	1 2
<i>Navicula capsa</i>				1
<i>Navicula cincta</i>	2	2	2	
<i>Navicula clementis</i>		1 2	1	1
<i>Navicula clementis</i> v. <i>quadrastigmata</i>		1		2 3
<i>Navicula confervacea</i>		1		
<i>Navicula costulata</i>	1	1 2 3	1	1 2 3
<i>Navicula cryptocephala</i>	1 2	1	1 3	1 2
<i>Navicula cryptocephala</i> v. <i>intermedia</i>	1	2		
<i>Navicula cryptocephala</i> v. <i>veneta</i>				1 2
<i>Navicula decussis</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Navicula diluviana</i>	3			
<i>Navicula elginensis</i>				1
<i>Navicula exigua</i> v. <i>capitata</i>				1
<i>Navicula exiguaformis</i>			1 3	1 2 3
<i>Navicula explanata</i>			1	
<i>Navicula fracta</i>	1			
<i>Navicula gastrum</i>	1 2	1 2		1 2
<i>Navicula gastrum</i> v. <i>signata</i>			1 2	1
<i>Navicula gastrum</i> v. <i>subsalsa</i>				3
<i>Navicula gottlandica</i>	2			3
<i>Navicula gregaria</i>	2			1 2 3
<i>Navicula grimeii</i> v. <i>rostellata</i>		1		
<i>Navicula heufleri</i>	1 2 3	1 2 3	1 2 3	1 3
<i>Navicula integra</i>	1 2	1 2		1
<i>Navicula jaernefeltii</i>				1 3
<i>Navicula lacustris</i>	2 3			2
<i>Navicula lanceolata</i>	1	2	1 2	2
<i>Navicula latens</i>	1 2 3	1 2 3	1 2 3	1 2 3

Table 10 con't. Master species list, Diatom psammon, 1972.

	May	Aug	Sept	Nov
<i>Navicula menisculus</i>	2	3	2 3	1 3
<i>Navicula menisculus v. upsaliensis</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Navicula micropupula</i>	1 2 3	1 2	1 3	1 2 3
<i>Navicula minima</i>	1 2 3	1 2 3	1 3	2 3
<i>Navicula minima v. okamurae</i>			3	
<i>Navicula mutica</i>	1			
<i>Navicula nyassensis</i>				2
<i>Navicula nyassensis fo. minor</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Navicula paludosa</i>	1 2		3	1 3
<i>Navicula paasaensis ?</i>		2		
<i>Navicula placentula</i>		1		
<i>Navicula platycephala</i>				2
<i>Navicula platystoma v. pantoscekii</i>			1	1 2
<i>Navicula protracta</i>	1		1 3	1
<i>Navicula protracta v. elliptica</i>		1	1	
<i>Navicula protracta v. subcapitata</i>		1		
<i>Navicula pseudoclementis</i>	2	2		
<i>Navicula pseudoscutiformis</i>				1
<i>Navicula pseudoventralis</i>				1
<i>Navicula pupula</i>	1 2	1 2 3	1 2 3	1 2 3
<i>Navicula pupula v. mutata</i>			1	
<i>Navicula pupula v. rectangularis</i>				2
<i>Navicula pupula v. rostrata</i>	1 2 3	1 2 3	1	
<i>Navicula radiosa</i>	1		1	
<i>Navicula radiosa v. tenella</i>	1	1 2	1 3	2
<i>Navicula reinhardtii</i>	1			
<i>Navicula scutelloides</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Navicula secreta v. apiculata</i>	1 3	1 2 3		
<i>Navicula seminuloides</i>	1 2	1 2 3	1 2 3	1 2 3
<i>Navicula seminulum</i>	3	1 2 3	1 2 3	1 2 3
<i>Navicula seminulum v. hustedtii</i>	3			
<i>Navicula seminulum v. intermedia</i>		1	1	
<i>Navicula simplex</i>	1	1	1	
<i>Navicula stroesei</i>	1 2	1 2		1 2 3
<i>Navicula submuralis</i>	1 3	1 2 3	1 2 3	1 2 3
<i>Navicula tantula</i>		2	2	1
<i>Navicula terminata</i>	1 2	2		1 2
<i>Navicula tripunctata</i>	1 2 3	1 2	1	1 2
<i>Navicula tripunctata v. schizonemoides</i>	1			1
<i>Navicula tuscula</i>			2	1

Table 10 con't. Master species list, Diatom psammon, 1972.

	May	Aug	Sept	Nov
<i>Navicula tuscule v. minuta</i>				3
<i>Navicula tuscule fo. minor</i>		1 2		1
<i>Navicula tuscule fo. obtusa</i>				2
<i>Navicula tuscule fo. rostrata</i>			1	
<i>Navicula vanheurnkii</i>	1 2	1	1	
<i>Navicula ventralis ?</i>	2		1	
<i>Navicula viridula</i>	1	1 3	3	1 2 3
<i>Navicula viridula v. avenacea</i>				1
<i>Navicula viridula v. linearis</i>			2	1 2 3
<i>Navicula viridula v. rostellata</i>	1 2 3	1 2 3	1 2 3	
<i>Navicula vulpina</i>			1	
<i>Navicula wittrockii</i>	1			
<i>Navicula wolterecki</i>				1
<i>Navicula spp. (our #1)</i>			2	
<i>Navicula spp. (our #2)</i>			2	
<i>Navicula spp. (our #71)</i>				1
<i>Navicula spp. (our #78)</i>	1 3	1 2 3	1 2 3	1 2
<i>Navicula spp. (our #79)</i>		2	1	
<i>Navicula spp.</i>	1 3	1 2 3	1 3	1
<i>Neidium affine v. hankense</i>			1	
<i>Neidium bisulcatum</i>		1	1 2	
<i>Neidium dubium</i>	1 2	1	1 3	1 2 3
<i>Neidium dubium fo. constrictum</i>	2	1	1	
<i>Neidium iridis v. vernalis</i>	1			1
<i>Neidium spp. (our #3)</i>	3	1 2	1	
<i>Neidium spp. (our #5)</i>			2	
<i>Nitzschia acicularis</i>	1 2 3	1 2 3	1	1
<i>Nitzschia acuta</i>	1 2	1	2 3	1 2 3
<i>Nitzschia amphibia</i>	1	2	1 3	1 2
<i>Nitzschia amphibia v. fossilis</i>			1	
<i>Nitzschia angustata</i>	1			
<i>Nitzschia angustata v. acuta</i>		1	1	3
<i>Nitzschia apiculata</i>	1			1
<i>Nitzschia bacata</i>	2	1 2 3	1 2	1 2
<i>Nitzschia capitellata</i>			1	1 3
<i>Nitzschia communis</i>			1	
<i>Nitzschia confinis</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Nitzschia denticula v. delognei</i>		3		
<i>Nitzschia dissipata</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Nitzschia dissipata v. media</i>	1	1		

Table 10 con't. Master species list, Diatom psammon, 1972.

	May	Aug	Sept	Nov
<i>Nitzschia epithemioides</i>				2
<i>Nitzschia fonticola</i>	1 2 3	1 2	1 2 3	1 2 3
<i>Nitzschia frustulum</i>				1
<i>Nitzschia frustulum v. perminuta</i>			2	
<i>Nitzschia frustulum v. subsalina</i>			1 3	3
<i>Nitzschia goetziana</i>	1			
<i>Nitzschia gracilis</i>			1	
<i>Nitzschia hungarica</i>				1
<i>Nitzschia insecta</i>			3	1 2
<i>Nitzschia kützingeriana</i>		1	1 3	1 2
<i>Nitzschia luzonensis</i>				1
<i>Nitzschia macilenta</i>			1 3	1
<i>Nitzschia microcephala</i>		1	1 2 3	1 3
<i>Nitzschia palea</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Nitzschia paleacea</i>		1		1
<i>Nitzschia recta</i>	1 2	2	1 2 3	1 2 3
<i>Nitzschia spiculoides</i>	1 2		1	1 2 3
<i>Nitzschia striolata</i>				3
<i>Nitzschia thermalis v. minor</i>			1	
<i>Nitzschia tryblionella</i>				1
<i>Nitzschia tryblionella v. levidensis</i>	1	1		
<i>Nitzschia</i> spp. (our #1)	1 2 3	1 2 3	1 2	1 2 3
<i>Nitzschia</i> spp. (our #2)	1 2 3	1 2 3	1 2 3	1 2 3
<i>Nitzschia</i> spp. (our #10)			1	
<i>Nitzschia</i> spp.			1	2
<i>Oestrupia zachariasii</i>	1 2	1	1	1 2
<i>Oestrupia zachariasii v. undulata</i>				2
<i>Opephora martyi</i>	1	1		2
<i>Opephora</i> spp.				1
<i>Pinnularia borealis</i>				1
<i>Pinnularia globiceps v. krookei</i> ?	1			
<i>Pinnularia molaris</i>	1			
<i>Pinnularia</i> spp.		2		1
<i>Pleurosigma</i> spp.		1		
<i>Rhizosolenia eriensis</i>	2			
<i>Rhizosolenia gracilis</i>	1 2 3	1 3	1	1 3
<i>Rhoicosphenia curvata</i>	1 2	1 2 3	1	1 2
<i>Rhopalodia gibba</i>				1
<i>Stauroneis acutiuscula</i>		1	3	1 2
<i>Stauroneis smithii</i>	1	1		1

Table 10 con't. Master species list, Diatom psammon, 1972.

	May	Aug	Sept	Nov
<i>Stauroneis</i> spp. (aff. <i>S. nana</i> )				1
<i>Stauroneis</i> spp.				1
<i>Stephanodiscus alpinus</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Stephanodiscus astraia</i>			1 2	1 2 3
<i>Stephanodiscus binderanus</i>	1 2	1	1 3	1 2 3
<i>Stephanodiscus hantzschii</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Stephanodiscus michiganiana</i>	2			
<i>Stephanodiscus minutus</i>		1 2	1 2 3	1 2 3
<i>Stephanodiscus niagarae</i>	1	2	1 2 3	
<i>Stephanodiscus subtilis</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Stephanodiscus tenuis</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Stephanodiscus transilvanicus</i>	1 2	1	1	1 3
<i>Stephanodiscus</i> spp. (our #5)	1 2 3	1 3	1	
<i>Stephanodiscus</i> spp. (our #14)	1 2 3	2		
<i>Stephanodiscus</i> spp.	3			
<i>Surirella angusta</i>	2	1 2	1 2 3	1 2
<i>Surirella ovata</i>	1 2 3	1 2	1	1
<i>Surirella</i> spp. (our #1)				1 2
<i>Surirella</i> spp. (our #2)				1 2
<i>Synedra acus</i>			1	
<i>Synedra amphicephala</i>			3	
<i>Synedra delicatissima</i>		1 2 3	1 3	1 2 3
<i>Synedra delicatissima</i> v. <i>angustissima</i>			1 2 3	1 2 3
<i>Synedra demerarae</i>			1 2	1 2 3
<i>Synedra fasciculata</i>				1
<i>Synedra filiformis</i>	2	1 2	1 2 3	1 2 3
<i>Synedra incisa</i>	1			1
<i>Synedra minuscula</i>			2	1 2
<i>Synedra ostenfeldii</i>	1 2 3	1 2 3	1	
<i>Synedra parasitica</i>				1
<i>Synedra parasitica</i> v. <i>subconstricta</i>			1 2	
<i>Synedra rumpens</i>	1			
<i>Synedra rumpens</i> v. <i>fragilarioides</i>		1		
<i>Synedra rumpens</i> v. <i>scotia</i>	1			
<i>Synedra tenera</i>				1
<i>Synedra ulna</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Synedra ulna</i> v. <i>danica</i>				3
<i>Synedra ulna</i> v. <i>oxyrhynchus</i>				3
<i>Synedra ulna</i> v. <i>subaequalis</i>				1
<i>Tabellaria fenestrata</i>	1 2 3	1 2 3	1 2 3	1 2 3
<i>Tabellaria flocculosa</i>			1	
<i>Tropidoneis lepidoptera</i> v. <i>proboscidea</i>		1		1

From Table 11 and Figure 2 certain pertinent remarks can be made. Although the total number of species identified for all the months was 364, only about 65% occurred in any one month. The months of May and November showed the largest number of species, with 57 and 65% of the total, while the months of August and September showed percentages of about 48 and 52 respectively. For those species occurring only in one given month, and not in any others, May and November were again the highest. November had 69 species peculiar to it, May had 41, while August and September were again fairly uniform in that they had 20 and 27 species occurring only in August and September respectively. Of the species identified, 25% occurred in all months.

In regards to species occurrence and location, relative to the waterline, it is noteworthy that in all months the number of species occurring above the waterline was greatest, and the least number of species were found below the waterline, with the exception of September where the waterline samples had 6 fewer species identified than the below-the-waterline samples. As far as the number of species occurring only above the waterline are concerned, there seems to be much more constancy percentage wise from month to month. Table 11 and Figure 2 show that the species that occur only above the waterline outnumber the combined totals of the species that occur only at and below the waterline. This suggests that the waterline and below the waterline, being more rapidly changing environments, are less suitable for permanent residency of many species.



Table 11. Diatom psammon summary species data.

	May	Aug.	Sept.	Nov.
Species occurring in given month	203	173	190	235
Percent of total species	56.4	47.5	52.2	64.6
Species occurring only in given month	41	20	27	69
Percent of total species	11.5	5.5	7.4	19.0
Species not occurring in given month	11	6	7	18
Percent of total species	3.0	1.6	1.9	4.9
Number of species above waterline	158	148	159	199
Occurring above waterline only	67	56	66	75
Percent occurring above waterline only	33.0	32.2	34.6	31.9
Number species at waterline	112	108	87	128
Occurring at waterline only	21	18	16	20
Percent occurring at waterline only	10.3	10.3	8.5	8.5
Number of species below waterline	79	66	93	110
Occurring below waterline only	13	4	10	12
Percent occurring below waterline only	6.4	2.3	5.2	5.1
Total species identified (May, August, September, November)				364
Species that occur in all of the months				91
Percent of total occurring in all months				25.0

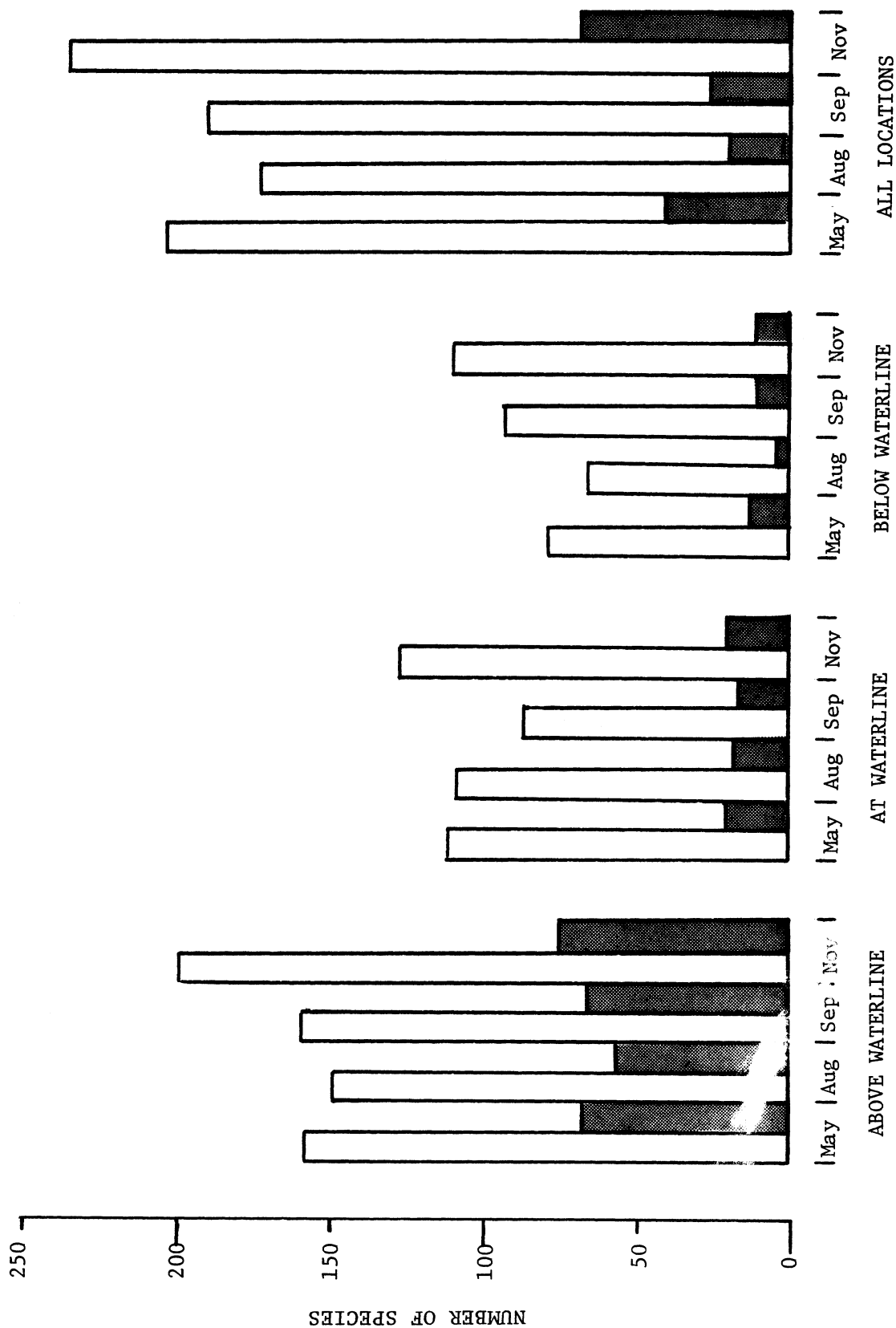


Figure 2. Number of species by location for all sampling sites. Shaded bars indicate species that occur only at the specified location for the given month.

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